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ABSTRACT

Based on the assumption that enrollment rates through 1977-78 will continue the trend from 1957-58 to 1967-68, projections are determined for several key educational statistics, including enrollment for all levels from kindergarten through graduate study, number of high school graduates and college degrees, number of teachers and other professional staff, expenditures of educational institutions, and basic student charges for institutions of higher education. (RA)

Highlights

If present trends continue, we can expect increases in—

- ☐ Fall enrollment in all regular public and private elementary and secondary day schools:
From 49.9 million in 1967 to 51.9 million in 1977.
- ☐ Fall degree-credit enrollment in institutions of higher education:
From 6.3 million in 1967 to 9.7 million in 1977.
- ☐ High school graduates from all public and private secondary day schools:
From 2.8 million in 1967-68 to 3.7 million in 1977-78.
- ☐ Bachelor's and first-professional degrees granted by institutions of higher education:
From 685,000 in 1967-68 to 980,000 in 1977-78.
- ☐ Fall full-time and part-time classroom teachers in all regular public and private elementary and secondary day schools:
From 2.1 million in 1967 to 2.3 million in 1977.
- ☐ Full-time equivalent instructional staff for resident degree-credit courses in institutions of higher education:
From 339,000 in 1967-68 to 472,000 in 1977-78.
- ☐ Total expenditures of all regular public and private elementary and secondary day schools:
From \$35.5 billion in 1967-68 to \$46.0 billion in 1977-78 (in 1967-68 dollars).
- ☐ Total expenditures of institutions of higher education:
From \$18.8 billion in 1967-68 to \$30.3 billion in 1977-78 (in 1967-68 dollars).

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Projections of Educational Statistics to 1977-78

(1968 Edition)

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Foreword

This publication supplies projections of statistics for elementary and secondary schools and institutions of higher education. The statistics include enrollment, graduates, teachers, and expenditures. These projections supersede the ones shown in "Projections of Educational Statistics to 1976-77" (OE-10030), 1967. They are based mainly on 1957-58 to 1967-68 Office of Education data, and they cover the period 1968-69 to 1977-78 for the United States. Many of these data are available by State for 1967-68 in the Office of Education publication, "Digest of Educational Statistics," 1968 edition.

The projections shown here assume that the past 10 years' trends in enrollment rates, retention rates, class sizes, and per pupil expenditures will continue through 1977-78. Further information about projected changes and the assumptions on which these are based are shown in the main body of this report. Details of the methodology used in making these projections are given in the appendix.

DOROTHY M. GILFORD,
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Chapter I.—Enrollment

Velma S. Southard and Martin M. Frankel

Total fall enrollment (table 1)¹

Total fall enrollment increased from 41 million in 1957 to 57 million in 1967, and is expected to be 63 million in 1977. This includes enrollment in all regular public and nonpublic elementary and secondary day schools; degree-credit enrollment in institutions of higher education, leading to a bachelor's or higher degree; and nondegree-credit enrollment in institutions of higher education in courses extending not more than 3 years beyond high school, which are designed to prepare for a technical, semiprofessional, or craftsman-clerical position. It excludes enrollment in the following types of courses given by institutions of higher education: Adult education on courses of regular length, short courses of any kind, and correspondence, television, or radio courses, some of which are degree-credit courses. It excludes enrollment in public and private subcollegiate, vocational, technical, and trade schools, unless these are a part of the regular school system, enrollment in evening classes in regular public high schools, and enrollment in elementary and secondary grades in the following schools: Residential schools for exceptional children, Federal schools for Indians, schools on Federal installations, and subcollegiate departments of institutions of higher education. It also excludes enrollments of children aged 3 to 6 years enrolled in independent nursery schools and kindergartens (exclusively preprimary schools). However, an estimate of the latter enrollment is included in table 1 as an exhibit item.

The enrollments included above are reported to the Office of Education in two regular surveys conducted each fall: Elementary and secondary enrollments reported by the State Departments of Education; and opening fall enrollment in institutions of higher education reported by the individual institutions. In addition, the Office of Education conducts surveys of elementary and secondary enrollment in regular nonpublic day schools.

Projected total fall enrollments are shown in table 1. The projections are based on the following assumptions: (1) the percentage of school-age persons enrolling in school and the retention rate of those already in school will continue the 1957-67 trend; and (2) the selected fertility rate, upon which the projections of school-age population are based, will continue without major change to 1977. The population base is shown in appendix table E and is the same as that used in the 1967 projection circular.¹

Fall enrollment in regular public elementary and secondary day schools (tables 2, 3)

Fall enrollment in regular public elementary and secondary day schools (table 2) increased from 33.0 million in 1957 to 43.9 million in 1967, and is expected to be 46.0 million in 1977. This enrollment excludes an estimated total of 0.3 million enrolled in schools such as residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. It also excludes an estimated 1.4 million between the ages of 3 and 6 enrolled in independent nursery schools and kindergartens and an estimated 1.3 million in "special" (business and trade) schools.²

High school enrollment will increase during the next decade because most of the children who will be progressing through high school in those years were born in the high-birth-rate years between 1946 and 1961, and because enrollment rates of persons of high school age are continuing to increase. Enrollment in grades 9 through 12 rose from 7.7 million in 1957 to 12.2 million in 1967 and is expected to be 15.2 million in 1977.

Enrollment in grades kindergarten through 8 is expected to increase through 1969 and then decrease as the smaller birth cohorts of the 1960's make up a larger and larger proportion of the numbers attending. Even if fertility rates should decline, it is likely that the downward trend in en-

¹ "Projections of Educational Statistics to 1976-77." U.S. Department of Health, Education, and Welfare, Office of Education.

² U.S. Department of Commerce, Bureau of the Census, "Current Population Reports, School Enrollment: October 1965," Series P-20, No. 167, August 30, 1967.

rollments will be reversed by the end of the 1970's. This is because the number of young mothers in the population is expected to be increasing in this period, thus offsetting any drop in fertility rates. The proportion of children of elementary school age who enroll in school is already so high (about 99 percent, if 5-year-olds are excluded) that any increase in enrollment rates for this age group will be minimal. Public school enrollment in kindergarten through grade 8 increased from 25.2 million in 1957 to 31.6 million in 1967, and is expected to be 30.8 million in 1977.

Enrollment in schools organized as high (secondary) schools increased from 10.1 million in 1957 to 16.5 million in 1967, and is expected to be 20.5 million in 1977. Enrollment in these schools is larger than the enrollment in grades 9 through 12 previously given because it includes some of the enrollment in grades 7 and 8. This also accounts for the fact that enrollment in schools organized as elementary schools is smaller than that in grades kindergarten through 8. The enrollment loss from grades 7 and 8 to schools organized as secondary schools may be even larger than the reported figures show because some school areas find it difficult to report by organizational level. Enrollment in public elementary schools increased from 22.9 million in 1957 to 27.4 million in 1967 but is expected to be only 25.6 million in 1977.

Projections of enrollment by grade groups (kindergarten to grade 8 and grades 9 to 12) are shown in table 2. They are summations of projected individual grades. These grades were derived (1) by applying projected 1957-67 age-specific enrollment rates to 5-, 6-, and 7-year-olds, and (2) by applying projected 1957-67 grade-specific retention rates to children in grades 2 through 11. The 5-, 6-, and 7-year-olds to which the enrollment rates were applied are divided into two groups, those who are already born and who will enter kindergarten, grade 1, or grade 2 between 1968 and 1972, and those yet to be born who will enter these grades between 1971 and 1977. The Bureau of the Census provides estimates or projections covering the number of children in both of these groups.

The first group, those already born and the projected 1957-67 enrollment rates supplied the basis for projecting kindergarten enrollment for the years 1968-70, grade 1 for the years 1968-71, and grade 2 for the years 1968-72. The progress of these children through later grades was estimated by applying to those in grades 2 through 11 the projected 1957-67 grade-to-grade retention rates.

For the second group, those expected to enter kindergarten between 1971 and 1977, grade 1 between 1972 and 1977, and grade 2 between 1973 and 1977, the Census projections of 5-, 6-, and 7-year-old population based on fertility rate assumption C were used. The progress of these children through grades 3 to 6 also was estimated by applying to those in grade 2 and beyond projected 1957-67 grade-to-grade retention rates. Thus, in 1971, only the kindergarten projection is dependent on fertility rate assumptions. By 1977, the last year shown in the tables, projections of kindergarten through grade 6 are dependent on fertility rate assumptions.

Series C, used as the base of these projections, is next to the lowest of the four series of completed fertility rate assumptions which the Bureau of the Census uses in projecting population by age. Series C assumes an average completed fertility rate of 2,775 children per 1,000 women in the childbearing ages of 15 to 45 years. This average is made up of age-specific fertility rates. For some of these age cohorts which have not yet reached age 45, the completed fertility rate is already higher than 2,775.³ Therefore, the average of 2,775 assumes a considerable decline in fertility rates for younger age cohorts.

A comparison of population projections of 5-, 6-, and 7-year-old children derived from different completed fertility rate assumptions and the definitions of the assumptions used by the Census are shown in appendix table H. A convenient method is given in appendix table I for converting to a different Census fertility assumption, the projections in any table which is based on enrollments calculated by using the Census series C fertility assumption. For example, the 1977 ratios shown on that table for converting series C to series B and D are 1.07 and 0.94, respectively, for the 5-13 year age group. This means that the projected enrollment in kindergarten through grade 8 would be 7 percent higher or lower than the series C projection if the series B or D assumption prevailed.

Projections of enrollment by organizational level are shown in table 3. Included under elementary enrollment in this table is enrollment in schools organized by grades. Included under secondary enrollment is enrollment in junior and senior high schools. This enrollment is organized by subjects taught. The projection by organizational level was derived by assuming that the percentage of seventh and eighth-grade enrollment organized as secondary school enrollment will continue to increase as it has in the past.

³ *Current Population Reports, Population Estimates: Projections of the Population of the United States, by Age, Sex, and Color to 1990, With Extensions of Population by Age and Sex to 2,015*, pp. 21-23, Series P-25, No. 381, December 18, 1967, U.S. Department of Commerce, Bureau of the Census.

Fall enrollment in regular nonpublic elementary and secondary day schools (tables 2, 3)

Fall enrollment in regular nonpublic elementary and secondary day schools, kindergarten through grade 12, increased from an estimated 5.2 million in 1957 to 6.0 million in 1967, and is expected to drop to 5.9 million in 1977. These figures exclude enrollment in residential schools for exceptional children, subcollegiate departments of institutions of higher education, and private vocational schools.

Enrollment in grades 9 through 12 increased from 0.9 million in 1957 to 1.4 million in 1967 and is expected to remain at about 1.4 million in 1977. The decline in enrollment in kindergarten through grade 8 which has been occurring recently appears to be leveling off. This enrollment increased from 4.3 million in 1957 to 4.6 million in 1967 and is expected to drop to 4.5 million in 1977. The drop in nonpublic enrollment may be attributed partly to the school-age-population decrease and partly to the effort of some nonpublic elementary schools to limit class size in order to lower pupil-teacher ratios.

Almost all nonpublic school enrollment in the past followed the traditional pattern of organization by level. That is, almost all nonpublic seventh and eighth graders were in elementary schools. While there is some evidence that this pattern is changing slowly, there is not sufficient data on which to base estimates. Therefore, the nonpublic school figures shown in this publication for grades K-8 and 9-12 are the same as the ones shown for enrollment by organizational level.

Projected enrollment in nonpublic elementary and secondary schools is shown in tables 2 and 3, along with public school enrollment. The projections are based on the assumption that downward trends in nonpublic school enrollment will level off and that there will be little change in the numbers enrolled through 1977.

Total opening fall enrollment in institutions of higher education (table 4)

Fall enrollment in 4-year and 2-year institutions of higher education, as reported in the opening fall enrollment series, includes resident and extension, full-time and part-time students taking work creditable toward a bachelor's or higher degree; and also resident and extension, full-time and part-time students in occupational or general studies programs not chiefly creditable toward a bachelor's degree but preparing for a technical, semiprofessional, or craftsman-clerical position. It excludes students in adult education courses, correspondence, television, and radio courses and students in subcollegiate departments of higher educational institutions. Fall enrollment in higher educational institutions (table 4) increased from an estimated 3.2 million in 1957 to 6.9 million in 1967 and is expected to be nearly 10.7 million in 1977, of which 9.2 percent are expected to be in occupational or general studies programs.

Of the 9.7 million students expected in 1977 who will be taking work toward a bachelor's or higher degree, 1.3 million or 13.4 percent are expected to be seeking degrees beyond the bachelor's or first-professional level. Of the remaining 8.4 million who are seeking undergraduate degrees, about one-fourth will be entering college for the first time.

First-time opening fall enrollment in degree-credit courses (tables 5, 6, 7)

First-time opening fall enrollment in degree-credit courses increased from 0.7 million in 1957 to an estimated 1.4 million in 1967 and is expected to be 2.1 million in 1977. Projected first-time degree-credit enrollment in all institutions of higher education is shown in table 5. It is based on the assumption that first-time enrollment as a percentage of the population averaging 18 years of age will continue the 1957-67 trend. This percentage increased from 31 in 1957 to 40 in 1966 and is expected to be 50 percent in 1977.

The distribution of first-time enrollment by sex and by control of the institution attended is shown in table 5 also. Women increased their percentage of first-time enrollment from 39 percent in 1957 to 43 percent in 1967 and are expected to reach 46 percent of all first-time degree-credit enrollment by 1977. The percentage of first-time degree-credit enrollment in public institutions increased from 60 percent in 1957 to 69 percent in 1967 and is expected to be 77 percent in 1977.

First-time degree-credit opening fall enrollment in 4-year institutions is shown in table 6, and that in 2-year institutions is shown in table 7. First-time enrollment in 2-year institutions represented 23 percent of all first-time degree-credit enrollment in 1957, 31 percent in 1967, and is expected to be 34 percent by 1977.

The enrollment of men accounted for 62 percent of first-time degree-credit enrollment in 2-year institutions in 1957, 60 percent in 1967, and 58 percent in 1977. Most students who enroll for the first time in 2-year colleges attend publicly-controlled institutions. The percentage in public

Institutions rose from 84 percent in 1957 to 87 percent in 1967, and is expected to reach 89 percent in 1977.

Total opening fall enrollment in degree-credit courses (tables 8, 9, 10)

Total opening fall enrollment in courses creditable toward a bachelor's or higher degree in all institutions of higher education increased from 3.0 million in 1957 to an estimated 6.3 million in 1967 and is expected to climb to 9.7 million by 1977. These figures include all resident and extension, full-time and part-time, graduate, undergraduate, and first-professional enrollment in degree-credit courses in 4-year institutions and in 2-year institutions. They include first-time as well as more advanced students.

Projected total opening fall degree-credit enrollment in all institutions of higher education is shown in table 8. The projections were made separately for men and women by type and by control of the institution attended. They are based on the assumption that the percentage of college-age people enrolled in college in each of the above enrollment categories will continue to increase from 1968 to 1977 as it did from 1957 to 1967. Attendance status was projected by holding constant through 1977, the 1967 percentage of full-time enrollment in each enrollment category. Further details of the methodology are given under the entries for tables 8 to 10 in appendix table A.

Table 8 also gives the distribution of degree-credit students in all institutions of higher education by sex, by attendance status, and by control of the institution attended. As shown by this distribution the proportion of women enrolled has increased in the past decade from 35 percent in 1957 to 40 percent in 1967. It is expected to be 44 percent by 1977. The distribution also shows that about 72 percent of all opening fall degree-credit students attend college full time. There is, however, considerable variation in the 1967 percentages of full-time attendance among the different categories of students by sex and by institutional type and control. The percentages for the different categories of students are given in the methodology for tables 10, 12, 14, and 15 in appendix table A. The 1967 percentages are expected to continue with only minor changes through 1977. According to the distribution shown in table 8, public institutions drew an increasing percentage of total enrollment, 58 percent in 1957 and 68 percent in 1967. The enrollment in public institutions was 1.8 million in 1957 and an estimated 4.3 million in 1967. This contrasted with an enrollment in private institutions of 1.3 million in 1957 and an estimated 2.0 million in 1967. Projected enrollment for 1977 is 7.1 million in public institutions and 2.6 million in private institutions.

Total degree-credit opening fall enrollment in 4-year institutions is shown in table 9. Since 83 percent of all degree-credit enrollment is in 4-year institutions, the enrollment patterns in these institutions resemble closely those of all institutions.

Total degree-credit opening fall enrollment in 2-year institutions is shown in table 10. Two-year institutions represented 12 percent of total degree-credit enrollment in 1957, and 17 percent in 1967. Total degree-credit undergraduate enrollment in 2-year institutions rose from 0.4 million in 1957 to an estimated 1.1 million in 1967 and is projected as 1.9 million in 1977. Men represented about 60 percent of the degree-credit enrollment in both types of institutions in 1967. The pattern of enrollment in other respects differed considerably between the 2-year and 4-year institutions. Forty-one percent of degree-credit students in 2-year institutions were part-time, in 4-year institutions, 25 percent were part-time. Ninety percent of degree-credit students in 2-year institutions attended public institutions; in 4-year institutions, 63 percent were in public institutions.

Estimated opening fall enrollment by level and type of institution (table 11)

Estimates and projections of resident graduate enrollment and of resident and extension undergraduate and first-professional enrollment, as components of total opening fall degree-credit enrollment in 4-year and 2-year institutions, are shown in table 11. Since opening fall degree-credit enrollment was not reported by level prior to fall 1967, the graduate and undergraduate levels had to be estimated from information provided by other studies in the Office of Education. The estimates of resident graduate enrollment from 1957 through 1963 were based on theoretical percentages derived from projection equations. The equations were based on resident graduate enrollment as a percentage of total resident and extension enrollment in 4-year institutions as observed over a period of 7 years, and computed separately for each sex and control category (see additional methodology details in appendix table A under entry for table 11). The Office of Education studies from which the basic data for these estimates were obtained were the biennial comprehensive surveys of enrollments in higher education for the first term 1957 through 1961 and the survey of migration of college students, 1963. Percentages derived from the resulting equations were applied to corresponding categories of opening fall enrollment in 4-year institutions to estimate

resident graduate enrollment. The equations were updated for making the 1968 projections by including an estimate of 1967 graduate enrollment based on the 1967 opening fall enrollment report of postbaccalaureate enrollment.

The estimates show that resident graduate enrollment has been the fastest growing component of total degree-credit enrollment. It increased from an estimated 0.3 million in 1957 to 0.7 million in 1967, an increase of 133 percent compared to an increase of 105 percent for estimated undergraduate and first-professional enrollment in the same period. The current military draft rules are expected to slow this growth somewhat but no exact measurement of their effects is possible at this time.

Estimated resident graduate opening fall enrollment (table 12)

Projected resident graduate opening fall enrollment and the distribution of this enrollment by sex, by attendance status, and by control of the institution attended is shown in table 12. These projections make no allowance for the effects of the present military draft rules on the number of graduate students. The projections by sex and by control of institution are based on the assumption that the proportion of the total degree-credit enrollment at the graduate level within each sex and control group will continue the 1957-67 trend to 1977. The projection by attendance status is based on the assumption that in each sex and control group, the 1967 ratio of estimated full-time graduate enrollment to total graduate enrollment will remain constant to 1977. Further details of the method used in making the projections are given in the footnotes to tables 12 and 13, and in the references to these tables in appendix table A.

The distribution of graduate enrollment by sex shows a somewhat greater increase in graduate enrollment of women than in that of men. This trend may be expected to continue and perhaps to accelerate as a result of the military draft of graduate students. Women represented 28 percent of all graduate enrollment in 1957, 34 percent in 1967, and a projected 38 percent in 1977. A greater percentage of graduate enrollment was full time and a greater percentage was in public institutions in 1967 than in 1957. Full-time enrollment was 39 percent of all graduate enrollment in 1957 and 43 percent in 1967. It is expected to remain at or near 43 percent through 1977. Public institutions drew 50 percent of all graduate enrollment in 1957, 63 percent in 1967, and are expected to have 72 percent by 1977.

Estimated resident and extension undergraduate and first-professional opening fall enrollment (tables 13, 14)

Projected undergraduate and first-professional opening fall enrollment together with the distribution of this enrollment by sex, by attendance status, and by control of the institution attended is shown in table 13. The projections by sex and by control of institution are based on the assumption that within each sex and institutional type and control category the proportion of the total enrollment at the undergraduate and first-professional level will follow the 1957-67 trend to 1977. The projection of undergraduate and first-professional enrollment by attendance status is based on the assumption that the 1967 ratio of estimated full-time undergraduate and first-professional enrollment to total undergraduate and first-professional enrollment in each sex and institutional type and control group will remain constant to 1977.

The distribution of undergraduate and first-professional students by sex, by attendance status, and by control of the institution attended differed greatly from that of resident graduate students. In 1967, men accounted for 59 percent of the undergraduate and first-professional students, and 66 percent of the resident graduate students. Seventy-five percent of undergraduate and first-professional students were full-time students contrasted with 43 percent of resident graduate students. Public institutions drew 68 percent of undergraduate and first-professional students and 63 percent of resident graduate students.

Undergraduate and first-professional enrollment in 4-year institutions is shown in table 14. In 1967, 81 percent of all undergraduate and first-professional enrollment was in 4-year institutions. Undergraduate enrollment in 2-year institutions is the same as total enrollment in these institutions. This is shown in table 7 and discussed with total enrollment in 4- and 2-year institutions.

Estimated opening fall enrollment in nondegree-credit courses (table 15)

Opening fall enrollment in nondegree-credit courses in occupational or general studies programs (excluding adult education) rose from an estimated 176,000 in 1957 to an estimated 564,000 in 1967 and is expected to be 984,000 in 1977. Forty-one percent of this enrollment is estimated to be full time for all years 1957 to 1977. Ninety-one percent was reported in publicly controlled

institutions in 1967 and this percentage is expected to rise to 93 percent in 1977. In 1957, 5 percent of all enrollment in institutions of higher education (excluding adult education) was estimated to be in nondegree-credit courses in occupational or general studies programs. In 1967 this percentage was 8 and in 1977 it is expected to be 9.

Projected total nondegree-credit opening fall enrollment and the distribution of this enrollment by attendance status of the student and by control of the institution attended is shown in table 15. The projection of total nondegree-credit enrollment is based on the assumption that within each sex and institutional control and type category nondegree-credit enrollment expressed as a percentage of population 18-21 years of age, will follow the 1957 through 1967 trends. The projected enrollments were then summed to obtain table 15. Full-time attendance status was estimated by holding constant to 1977 the percentage of total nondegree-credit enrollment that was estimated to be full time in 1967.

**Estimated opening fall full-time equivalent enrollment
in degree-credit and non-degree-credit courses (table 16)**

Estimated opening fall full-time equivalent enrollment in degree-credit and nondegree-credit courses increased from 2.5 million in 1957 to 5.5 million in 1967, and is expected to be 8.3 million in 1977. In 1967, 69 percent of this enrollment was in public institutions, and 74 percent is expected to be in public institutions in 1977.

Estimated full-time equivalent enrollment in degree-credit courses increased from 2.4 million in 1957 to 5.2 million in 1967 and to a projected 7.8 million in 1977. Estimated full-time equivalent enrollment in nondegree-credit courses increased from 102,000 in 1957 to 326,000 in 1967 and is expected to be 569,000 in 1977. The estimated increase from 1957 to 1967 of 220 percent in non-degree-credit full-time equivalent enrollment contrasts with an estimated increase in degree-credit full-time equivalent enrollment of 117 percent.

Projections of degree-credit and nondegree-credit opening fall full-time equivalent enrollment by control of institution are shown in table 16.

Figure 1. — Enrollment in grades K-12 of regular day schools: United States, fall 1957 to 1977

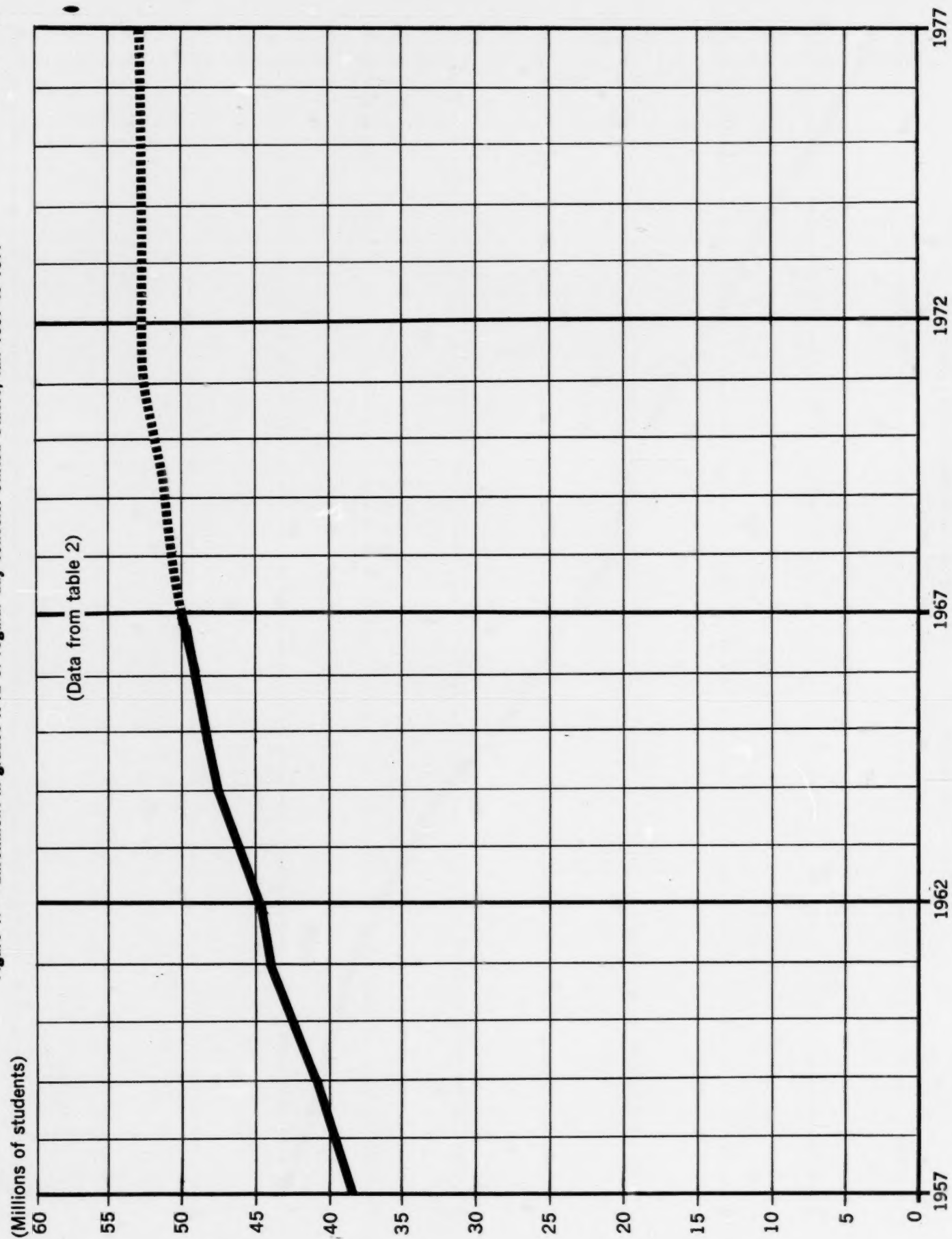


Figure 2. — Total degree-credit enrollment in all institutions of higher education:
United States, fall 1957 to 1977

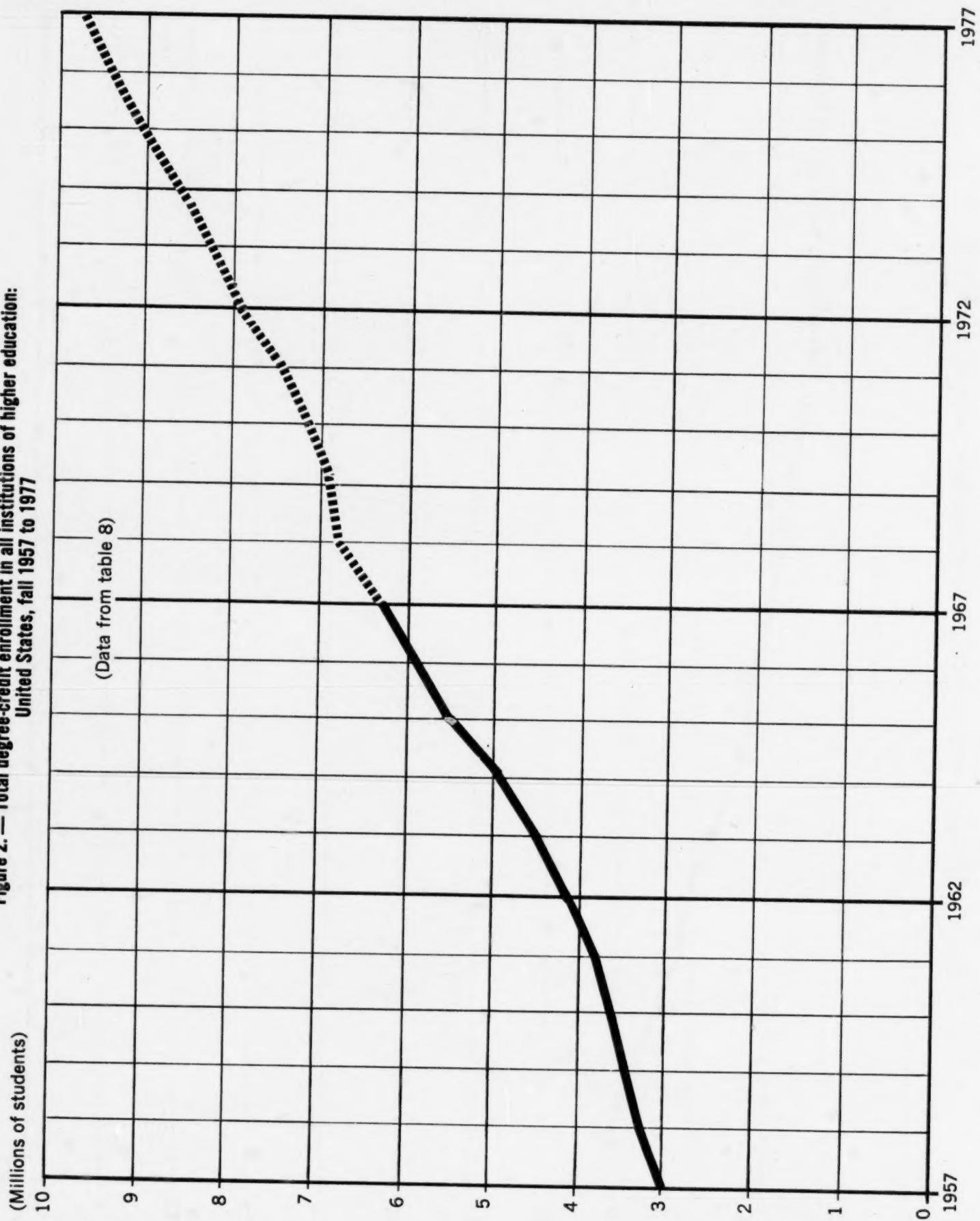


TABLE 1.—Enrollment in educational institutions by level and institutional control: United States, fall 1957 to 1977
[In thousands]

Year (fall)	Total enrollment (excluding independent nursery schools and kindergartens)	Institutions of higher education ¹				Regular elementary and secondary day schools ²				Estimated independent nursery schools and kindergartens ³		
		Public		Nonpublic		Grades K-8		Grades 9-12		Public	Nonpublic	
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1)												
1957	41,375	34,847	6,528	1,896	1,328	25,230	4,300	7,721	900			
1958	43,001	36,115	6,886	2,034	1,386	26,004	4,500	8,077	1,000			
1959	44,354	37,316	7,038	2,134	1,438	26,911	4,600	8,271	1,000			
1960	45,969	38,557	7,412	2,276	1,512	27,692	4,800	8,589	1,100			
1961	47,411	39,933	7,478	2,469	1,578	28,095	4,800	9,369	1,100			
1962	49,253	41,502	7,751	2,753	1,651	28,637	4,900	10,112	1,200			
1963	51,253	43,253	8,000	3,066	1,700	29,304	5,000	10,883	1,300			
1964	52,996	44,884	8,112	3,468	1,812	30,025	5,000	11,391	1,300	236	647	
1965	54,394	46,143	8,251	3,970	1,951	30,563	4,900	11,610	1,400	304	799	
1966	55,529	47,388	8,141	4,349	2,041	31,145	4,700	11,894	1,400	374	853	
1967	56,799	48,703	8,096	4,816	2,096	31,640	4,600	12,247	1,400	430	897	
PROJECTED ⁴												
1968	58,069	49,885	8,184	5,185	2,184	32,000	4,600	12,700	1,400	524	950	
1969	58,641	50,554	8,087	5,354	2,187	32,100	4,500	13,100	1,400	602	990	
1970	59,352	51,223	8,129	5,623	2,229	32,100	4,500	13,500	1,400	685	1,019	
1971	59,843	51,651	8,192	5,951	2,292	31,800	4,500	13,900	1,400	781	1,078	
1972	60,386	52,119	8,267	6,319	2,367	31,500	4,500	14,300	1,400	889	1,170	
1973	60,831	52,491	8,340	6,691	2,440	31,200	4,500	14,600	1,400	1,007	1,281	
1974	61,250	52,846	8,404	7,046	2,504	31,000	4,500	14,800	1,400	1,136	1,396	
1975	61,756	53,294	8,462	7,394	2,562	30,800	4,500	15,100	1,400	1,271	1,508	
1976	62,132	53,620	8,512	7,720	2,612	30,700	4,500	15,200	1,400	1,414	1,648	
1977	62,568	54,018	8,550	8,018	2,650	30,800	4,500	15,200	1,400	1,559	1,784	

¹ Includes degree-credit and nondegree-credit enrollments.
² Does not include independent nursery schools and kindergartens, residential schools for exceptional children, sub-collegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.
³ Estimates of independent nursery school and kindergarten enrollments are based on the difference between all nursery school and kindergarten enrollments of children aged 3, 4, 5, and 6 years, as reported by the Bureau of the Census, and nursery school and kindergarten enrollments reported by the regular public and private schools.

⁴ For assumptions on which projections of elementary, secondary, and higher education enrollments are based and for projection methods used, see footnotes to tables 2, 8, and 15, and methodology in appendix table A.

The projections of enrollments in independent nursery schools and kindergartens are based on the following assumptions: (1) Enrollments in all nursery schools and kindergartens of children aged 3, 4, 5, and 6 years will follow the 1964-67 trends of enrollment in these schools at each age level as a percentage of the total population of that age; and (2) enrollments in independent nursery schools and kindergartens of children aged 3, 4, 5, and 6 years will be the difference between enrollment in all nursery schools and kindergartens, as reported by the

Census Bureau, and enrollment in nursery schools and kindergartens reported by regular public and private schools.
For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Nursery school and kindergarten enrollment data are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: "Nursery-kindergarten Enrollment of Children under Six," October 1964 through 1967. Sources for enrollments in regular elementary and secondary schools and institutions of higher education are given on tables 2, 8, and 15.

TABLE 2.—Enrollment in grades K-8 and 9-12 of regular day schools, by institutional control:
United States, fall 1957 to 1977¹

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	K-8	9-12	K-12	K-8 ³	9-12 ³	K-12	K-8	9-12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957.....	38,151	29,530	8,621	32,951	25,230	7,721	5,200	4,300	900
1958.....	39,581	30,504	9,077	34,081	26,004	8,077	5,500	4,500	1,000
1959.....	40,782	31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,000
1960.....	42,181	32,492	9,689	36,281	27,692	8,589	5,900	4,800	1,100
1961.....	43,364	32,895	10,469	37,464	28,095	9,369	5,900	4,800	1,100
1962.....	44,849	33,537	11,312	38,749	28,637	10,112	6,100	4,900	1,200
1963.....	46,487	34,304	12,183	40,187	29,304	10,883	6,300	5,000	1,300
1964.....	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	1,300
1965.....	48,473	35,463	13,010	42,173	30,563	11,610	6,300	4,900	1,400
1966.....	49,139	35,845	13,294	43,039	31,145	11,894	6,100	4,700	1,400
1967.....	49,887	36,240	13,647	⁴ 43,887	⁵ 31,640	⁶ 12,247	6,000	4,600	1,400
PROJECTED ⁶									
1968.....	50,700	36,600	14,100	44,700	32,000	12,700	6,000	4,600	1,400
1969.....	51,200	36,600	14,500	45,300	32,100	13,100	5,900	4,500	1,400
1970.....	51,500	36,600	14,900	45,600	32,100	13,500	5,900	4,500	1,400
1971.....	51,700	36,300	15,300	45,800	31,800	13,900	5,900	4,500	1,400
1972.....	51,700	36,000	15,700	45,800	31,500	14,300	5,900	4,500	1,400
1973.....	51,700	35,700	16,000	45,800	31,200	14,600	5,900	4,500	1,400
1974.....	51,700	35,500	16,200	45,800	31,000	14,800	5,900	4,500	1,400
1975.....	51,700	35,300	16,500	45,800	30,800	15,100	5,900	4,500	1,400
1976.....	51,800	35,200	16,600	45,900	30,700	15,200	5,900	4,500	1,400
1977.....	51,900	35,300	16,600	46,000	30,800	15,200	5,900	4,500	1,400

¹ Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey. See also estimates for independent nursery schools and kindergartens, table 1.

³ Fall enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1957 through 1961 estimated from school year enrollment.

⁴ Actual data from Office of Education surveys.

⁵ Preliminary data from State Departments of Education.

⁶ The projection of fall enrollment in regular day schools is based on the following assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old population in public school kindergarten and grades 1 and 2 will follow the 1957-67 trends; (2) the retention rates of public school grade 7 to grade 6 will remain constant at 103 percent from 1972 through 1977; (3) the retention rates of public school grade 9 to grade 8 will follow the 1957-67 trend with the restriction that it cannot exceed 105 percent; (4) the retention rates of all other public school grades will follow the 1957-67 trends with the restriction that they cannot exceed 100 percent; and (5) enrollment in grades K-8 and 9-12 in regular nonpublic day schools will remain approximately the same throughout the projection period.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1967; (2) "Enrollment, Teachers, and School-housing," fall 1957 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Secondary Schools, 1960-61".

The population projections as of October 1, on which the enrollment projections are based (appendix table E), are consistent with series C population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-25, No. 388, March 14, 1968. The series C population projection assumes that a calendar-year fertility rate approximating that of 1966 will prevail throughout the projection period.

For enrollment projections based on population projections, series B and series D see appendix tables J and K.

TABLE 3.—Enrollment in regular day schools, by institutional control and organizational level: United States, fall 1957 to 1977 ¹

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957.....	38,151	27,160	10,991	32,951	22,860	10,091	5,200	4,300	900
1958.....	39,581	27,915	11,666	34,081	23,415	10,666	5,500	4,500	1,000
1959.....	40,782	28,506	12,276	35,182	23,906	11,276	5,600	4,600	1,000
1960.....	42,181	29,150	13,031	36,281	24,350	11,931	5,900	4,800	³ 1,100
1961.....	43,364	29,403	13,961	37,464	24,603	12,861	5,900	³ 4,800	³ 1,100
1962.....	44,849	30,164	14,685	38,749	25,264	13,485	6,100	4,900	1,200
1963.....	46,487	30,775	15,712	40,187	25,775	14,412	6,300	5,000	³ 1,300
1964.....	47,716	31,221	16,495	41,416	26,221	15,195	6,300	5,000	³ 1,300
1965.....	48,473	31,570	16,904	42,173	26,670	15,504	6,300	³ 4,900	³ 1,400
1966.....	49,139	31,805	17,334	43,039	27,105	15,934	6,100	4,700	1,400
1967.....	49,887	31,981	17,906	⁴ 43,887	⁴ 27,381	⁴ 16,506	6,000	4,600	1,400
PROJECTED ⁵									
1968.....	50,700	32,100	18,600	44,700	27,500	17,200	6,000	4,600	1,400
1969.....	51,200	32,000	19,200	45,300	27,500	17,800	5,900	4,500	1,400
1970.....	51,500	31,800	19,700	45,600	27,300	18,300	5,900	4,500	1,400
1971.....	51,700	31,400	20,300	45,800	26,900	18,900	5,900	4,500	1,400
1972.....	51,700	31,000	20,700	45,800	26,500	19,300	5,900	4,500	1,400
1973.....	51,700	30,500	21,200	45,800	26,000	19,800	5,900	4,500	1,400
1974.....	51,700	30,200	21,500	45,800	25,700	20,100	5,900	4,500	1,400
1975.....	51,700	30,000	21,800	45,800	25,500	20,400	5,900	4,500	1,400
1976.....	51,800	29,900	21,900	45,900	25,400	20,500	5,900	4,500	1,400
1977.....	51,900	30,100	21,800	46,000	25,600	20,500	5,900	4,500	1,400

¹ Does not include independent nursery schools and kindergartens, residential schools for exceptional children, sub-collegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey. See also estimates for independent nursery schools and kindergartens, table 1.

³ Actual data from Office of Education surveys.

⁴ Preliminary data from State Departments of Education.

⁵ The projection of fall enrollment in regular public day schools by organizational level is based on the assumption that the percentage of enrollment in grades 7 and 8 that will be organized as elementary or as secondary enrollment will follow the 1967-67 trend.

The projection of regular fall enrollment in nonpublic schools by organizational level is based on the assumption that substantially all nonpublic enrollment in grades 7 and 8 will continue as elementary enrollment.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1967; (2) "Enrollment, Teachers, and School-housing," fall 1957 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66; (5) "Nonpublic School Enrollment in grades 9-12, Fall 1964, and Graduates, 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Secondary Schools, 1960-61."

The population projections as of October 1, on which the enrollment projections are based (appendix table E), are consistent with series C population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports", Series P-25, No. 388, March 14, 1968. The series C population projection assumes that a calendar-year fertility rate approximating that of 1966 will prevail throughout the projection period.

TABLE 4.—Total enrollment in all institutions of higher education, by degree-credit status and level:
United States, fall 1957 to 1977 ¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Total degree-credit and Nondegree-credit enrollment	Degree-credit					Nondegree-credit
		Total degree-credit	Estimated graduate (resident only) ²	Estimated undergraduate (includes 1st professional) ³			Total undergraduate in vocational or general studies programs ⁴
				Total	1st time	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-----	3, 224	3, 047	288	2, 760	724	2, 036	176
1958-----	3, 420	3, 236	312	2, 924	775	2, 149	184
1959-----	3, 571	3, 377	331	3, 046	822	2, 224	194
1960-----	3, 789	3, 583	356	3, 227	923	2, 304	206
1961-----	4, 047	3, 861	386	3, 474	1, 018	2, 456	183
1962-----	4, 404	4, 175	422	3, 753	1, 031	2, 722	229
1963-----	4, 766	4, 495	464	4, 031	1, 046	2, 985	271
1964-----	5, 280	4, 950	517	4, 433	1, 225	3, 208	330
1965-----	5, 921	5, 526	582	4, 945	1, 442	3, 503	395
1966-----	6, 390	^a 5, 885	624	5, 261	1, 378	3, 884	^a 505
1967-----	6, 912	^a 6, 348	688	5, 659	1, 439	4, 220	^b 564
PROJECTED ^c							
1968-----	7, 369	6, 758	749	6, 010	1, 496	4, 514	611
1969-----	7, 541	6, 906	781	6, 125	1, 575	4, 550	635
1970-----	7, 852	7, 181	828	6, 353	1, 661	4, 692	671
1971-----	8, 243	7, 530	886	6, 644	1, 745	4, 899	713
1972-----	8, 686	7, 925	952	6, 974	1, 820	5, 154	760
1973-----	9, 130	8, 322	1, 019	7, 303	1, 889	5, 414	808
1974-----	9, 549	8, 695	1, 085	7, 609	1, 960	5, 649	855
1975-----	9, 956	9, 056	1, 152	7, 904	2, 025	5, 878	901
1976-----	10, 332	9, 388	1, 217	8, 171	2, 074	6, 097	944
1977-----	10, 667	9, 684	1, 279	8, 405	2, 127	6, 278	984

¹ Includes both resident and extension enrollment unless otherwise noted. Does not include the following type of enrollment in institutions of higher education: (1) Adult education (degree-credit and nondegree-credit courses of approximately regular length but taken without reference to credit toward a degree or other formal award, by persons who have terminated their formal education); (2) degree-credit and nondegree-credit courses by mail, television, or radio; (3) short courses (considerably less than regular length but offering instruction on at least 4 separate days); and (4) individual lessons only (as in music, art, speech, etc.).

² Estimate includes resident graduate students in liberal arts and sciences and students taking work beyond the first-professional degree. Graduate enrollment is somewhat higher than enrollment for advanced degrees because graduate enrollment includes students taking work at the graduate level who are not enrolled for advanced degrees. For bases used in making estimates, see table 11.

³ Estimate includes students studying for degrees such as M.D., D.D.S., D.V.M., LL.B., B.D., and other degrees classified as first-professional. These students represented 3.7 percent of all undergraduate and 1st-professional enrollments in 1963. For bases used in making estimates, see table 11.

⁴ Vocational or general studies programs, not chiefly creditable toward a bachelor's or higher degree and extending not

more than 3 years beyond high school, are designed to prepare for immediate employment in an occupation or cluster of occupations.

⁵ Estimates based on 1966 and 1967 opening fall surveys of total degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from the 1966 comprehensive survey of total degree-credit and total nondegree-credit enrollment reported separately.

⁶ For assumptions underlying projections and for methods of projecting, see the following text table footnotes: For column 3, table 8; for column 4, tables 11, and 12; for column 5, table 13; for column 6, table 5; and for column 8, table 15. See also, appendix table A and table A footnotes.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications; (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first-term 1957 through 1963; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

TABLE 5.—*First-time degree-credit enrollment in all institutions of higher education, by sex, and by institutional control: United States, fall 1957 to 1977*

[Resident and extension opening fall enrollment]

Year (fall)	First-time degree-credit enrollment	Sex		Control	
		Men	Women	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)
1957.....	723, 879	441, 969	281, 910	434, 066	289, 813
1958.....	775, 308	465, 422	309, 886	474, 621	300, 687
1959.....	821, 520	487, 890	333, 630	501, 543	319, 977
1960.....	923, 069	539, 512	383, 557	577, 744	345, 325
1961.....	1, 018, 361	591, 913	426, 448	648, 236	370, 125
1962.....	1, 030, 554	598, 099	432, 455	669, 728	360, 826
1963.....	1, 046, 417	604, 282	442, 135	686, 861	359, 556
1964.....	1, 224, 840	701, 524	523, 316	814, 664	410, 176
1965.....	1, 441, 822	829, 215	612, 607	990, 021	451, 801
1966 ¹	1, 378, 000	787, 000	591, 000	947, 000	430, 000
1967 ¹	1, 439, 000	814, 000	626, 000	1, 024, 000	415, 000

PROJECTED²

1968.....	1, 496, 000	841, 000	655, 000	1, 074, 000	422, 000
1969.....	1, 575, 000	881, 000	694, 000	1, 141, 000	434, 000
1970.....	1, 661, 000	923, 000	738, 000	1, 214, 000	447, 000
1971.....	1, 745, 000	964, 000	781, 000	1, 285, 000	460, 000
1972.....	1, 820, 000	1, 002, 000	818, 000	1, 351, 000	469, 000
1973.....	1, 889, 000	1, 035, 000	854, 000	1, 412, 000	477, 000
1974.....	1, 960, 000	1, 068, 000	892, 000	1, 475, 000	485, 000
1975.....	2, 025, 000	1, 099, 000	927, 000	1, 535, 000	491, 000
1976.....	2, 074, 000	1, 120, 000	954, 000	1, 581, 000	492, 000
1977.....	2, 127, 000	1, 145, 000	982, 000	1, 632, 000	495, 000

¹ Estimates based on 1966 and 1967 opening fall surveys of first-time degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from fall 1966 comprehensive survey of total degree-credit and total non-degree-credit enrollment reported separately. First-time non-degree-credit enrollment was not reported prior to fall 1966.

² The projection of first-time opening fall degree-credit enrollment in all institutions of higher education by sex and by institutional control is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1957-67 trend to 1977 in each category of enrollment.

Veterans attending college through aid provided by the Veteran's Readjustment Benefits Act of 1966 are included in the

trend projections. For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; and (2) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE 6.—First-time degree-credit enrollment in 4-year institutions of higher education, by sex, and by institutional control: United States, fall 1957 to 1977

[Resident and extension opening fall enrollment]

Year (fall)	First-time degree-credit enrollment	Sex		Control	
		Men	Women	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)
1957.....	556, 239	337, 932	218, 307	293, 544	262, 695
1958.....	600, 359	357, 678	242, 681	328, 242	272, 117
1959.....	639, 841	376, 633	263, 208	348, 150	291, 691
1960.....	709, 093	410, 942	298, 151	395, 884	313, 209
1961.....	774, 584	446, 248	328, 336	438, 135	336, 449
1962.....	770, 114	441, 936	328, 178	445, 191	324, 923
1963.....	774, 744	441, 220	333, 524	452, 104	322, 640
1964.....	902, 599	508, 117	394, 482	539, 251	363, 348
1965.....	1, 041, 025	587, 789	453, 236	642, 233	398, 792
1966 ¹	989, 000	555, 000	434, 000	610, 000	379, 000
1967 ¹	992, 000	548, 000	444, 000	628, 000	364, 000
PROJECTED ²					
1968.....	1, 026, 000	562, 000	463, 000	657, 000	368, 000
1969.....	1, 074, 000	584, 000	490, 000	697, 000	377, 000
1970.....	1, 127, 000	608, 000	519, 000	740, 000	388, 000
1971.....	1, 178, 000	630, 000	548, 000	782, 000	396, 000
1972.....	1, 223, 000	651, 000	573, 000	820, 000	403, 000
1973.....	1, 264, 000	668, 000	596, 000	856, 000	408, 000
1974.....	1, 305, 000	685, 000	621, 000	893, 000	413, 000
1975.....	1, 343, 000	700, 000	643, 000	927, 000	416, 000
1976.....	1, 370, 000	709, 000	661, 000	954, 000	416, 000
1977.....	1, 399, 000	720, 000	679, 000	983, 000	416, 000

¹ Estimates based on 1966 and 1967 opening fall surveys of first-time degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from fall 1966 comprehensive survey of total degree-credit and total nondegree-credit enrollment reported separately. First-time nondegree-credit enrollment was not reported prior to fall 1966.

² The projection of first-time opening fall degree-credit enrollment in 4-year institutions of higher education by sex and by institutional control is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1957-67 trend to 1977 in each category of enrollment.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the

trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; and (2) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE 7.—First-time degree-credit enrollment in 2-year institutions of higher education, by sex, and by institutional control: United States, fall 1957 to 1977

[Resident and extension opening fall enrollment]

Year (fall)	First-time degree-credit enrollment	Sex		Control	
		Men	Women	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)
1957.....	167,640	104,037	63,603	140,522	27,118
1958.....	174,949	107,744	67,205	146,379	28,570
1959.....	181,679	111,257	70,422	153,393	28,286
1960.....	213,976	128,570	85,406	181,860	32,116
1961.....	243,777	145,665	98,112	210,101	33,676
1962.....	260,440	156,163	104,277	224,537	35,903
1963.....	271,673	163,062	108,611	234,757	36,916
1964.....	322,241	193,407	128,834	275,413	46,828
1965.....	400,797	241,426	159,371	347,788	53,009
1966 ¹	389,000	232,000	157,000	337,000	51,000
1967 ¹	447,000	266,000	181,000	396,000	51,000
PROJECTED ²					
1968.....	471,000	279,000	192,000	417,000	53,000
1969.....	501,000	296,000	205,000	445,000	56,000
1970.....	534,000	315,000	219,000	474,000	60,000
1971.....	567,000	334,000	233,000	504,000	63,000
1972.....	597,000	351,000	246,000	531,000	66,000
1973.....	625,000	367,000	258,000	556,000	69,000
1974.....	655,000	384,000	271,000	583,000	72,000
1975.....	682,000	399,000	283,000	607,000	75,000
1976.....	704,000	411,000	293,000	627,000	77,000
1977.....	728,000	425,000	303,000	649,000	79,000

¹ Estimates based on 1966 and 1967 opening fall surveys of first-time degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from fall 1966 comprehensive survey of total degree-credit and total nondegree-credit enrollment reported separately. First-time nondegree-credit enrollment was not reported prior to fall 1966.

² The projection of first-time opening fall degree-credit enrollment in 2-year institutions of higher education by sex and by institutional control is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1957-67 trend to 1977 in each category of enrollment.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in

the trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; and (2) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE 8.—Total degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1957 to 1977

[Resident and extension opening fall enrollment]

Year (fall)	Total degree-credit enrollment	Sex		Attendance status ¹		Control	
		Men	Women	Full time	Part time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	3, 047, 373	1, 991, 411	1, 055, 962	2, 077, 000	970, 000	1, 762, 726	1, 284, 647
1958.....	3, 236, 414	2, 098, 164	1, 138, 250	2, 215, 000	1, 022, 000	1, 893, 843	1, 342, 571
1959.....	3, 377, 273	2, 160, 886	1, 216, 387	2, 314, 000	1, 063, 000	1, 984, 022	1, 393, 251
1960.....	3, 582, 726	2, 256, 877	1, 325, 849	2, 466, 000	1, 117, 000	2, 115, 893	1, 466, 833
1961.....	3, 860, 643	2, 408, 601	1, 452, 042	2, 714, 000	1, 147, 000	2, 328, 912	1, 531, 731
1962.....	4, 174, 936	2, 587, 291	1, 587, 645	2, 902, 101	1, 272, 835	2, 573, 720	1, 601, 216
1963.....	4, 494, 626	2, 772, 562	1, 722, 064	3, 068, 469	1, 426, 157	2, 848, 454	1, 646, 172
1964.....	4, 950, 173	3, 032, 992	1, 917, 181	3, 417, 796	1, 532, 377	3, 179, 527	1, 770, 646
1965.....	5, 526, 325	3, 374, 603	2, 151, 722	3, 910, 848	1, 615, 477	3, 624, 442	1, 901, 883
1966 ²	5, 885, 000	3, 554, 000	2, 331, 000	4, 230, 000	1, 655, 000	3, 897, 000	1, 988, 000
1967 ²	6, 348, 000	3, 800, 000	2, 548, 000	4, 560, 000	1, 788, 000	4, 305, 000	2, 043, 000

PROJECTED ³

1968.....	6, 758, 000	4, 019, 000	2, 739, 000	4, 845, 000	1, 913, 000	4, 629, 000	2, 129, 000
1969.....	6, 906, 000	4, 080, 000	2, 825, 000	4, 941, 000	1, 964, 000	4, 775, 000	2, 131, 000
1970.....	7, 181, 000	4, 217, 000	2, 965, 000	5, 129, 000	2, 052, 000	5, 009, 000	2, 172, 000
1971.....	7, 530, 000	4, 393, 000	3, 137, 000	5, 368, 000	2, 162, 000	5, 297, 000	2, 233, 000
1972.....	7, 925, 000	4, 595, 000	3, 330, 000	5, 640, 000	2, 286, 000	5, 619, 000	2, 306, 000
1973.....	8, 322, 000	4, 799, 000	3, 523, 000	5, 911, 000	2, 411, 000	5, 944, 000	2, 377, 000
1974.....	8, 695, 000	4, 986, 000	3, 708, 000	6, 165, 000	2, 530, 000	6, 255, 000	2, 440, 000
1975.....	9, 056, 000	5, 166, 000	3, 889, 000	6, 410, 000	2, 646, 000	6, 559, 000	2, 497, 000
1976.....	9, 388, 000	5, 330, 000	4, 058, 000	6, 633, 000	2, 755, 000	6, 843, 000	2, 545, 000
1977.....	9, 684, 000	5, 470, 000	4, 214, 000	6, 830, 000	2, 854, 000	7, 102, 000	2, 581, 000

¹ Attendance status for 1957 through 1961 and for 1966 and 1967 is estimated from first-term enrollment by attendance status reported in comprehensive enrollment surveys, 1959, 1961, and 1966.

² Estimates based on 1966 and 1967 opening fall surveys of total degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from the 1966 comprehensive survey of total degree-credit and total nondegree-credit enrollment reported separately.

³ The projection of total degree-credit enrollment in all institutions by sex and institutional control is based on the assumption that enrollment in these institutions, expressed as a percentage of population aged 18-21 years, will follow the 1957-67 trend to 1977 in each enrollment category.

The projection of total degree-credit enrollment in all institutions by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in the 1966 comprehensive enrollment survey, with minor adjustments, will remain constant

to 1977.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first-term 1957 through 1963; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE 9.—Total degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1957 to 1977

[Resident and extension opening fall enrollment]

Year (fall)	Total degree-credit enrollment	Sex		Attendance status ¹		Control	
		Men	Women	Full time	Part time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	2, 678, 211	1, 753, 732	924, 479	1, 871, 000	807, 000	1, 446, 736	1, 231, 475
1958.....	2, 850, 805	1, 850, 124	1, 000, 681	2, 000, 000	851, 000	1, 562, 962	1, 287, 843
1959.....	2, 967, 558	1, 901, 132	1, 066, 426	2, 088, 000	879, 000	1, 628, 055	1, 339, 503
1960.....	3, 131, 393	1, 974, 722	1, 156, 671	2, 219, 000	912, 000	1, 723, 583	1, 407, 810
1961.....	3, 342, 718	2, 088, 445	1, 254, 273	2, 421, 000	922, 000	1, 872, 531	1, 470, 187
1962.....	3, 585, 407	2, 221, 667	1, 363, 740	2, 584, 908	1, 000, 499	2, 054, 463	1, 530, 944
1963.....	3, 869, 837	2, 385, 902	1, 483, 935	2, 741, 251	1, 128, 586	2, 297, 146	1, 572, 691
1964.....	4, 239, 305	2, 593, 483	1, 645, 822	3, 021, 411	1, 217, 894	2, 558, 668	1, 680, 637
1965.....	4, 684, 888	2, 852, 757	1, 832, 131	3, 414, 545	1, 270, 343	2, 886, 552	1, 798, 336
1966 ²	4, 941, 000	2, 977, 000	1, 964, 000	3, 662, 000	1, 279, 000	3, 057, 000	1, 883, 000
1967 ²	5, 272, 000	3, 147, 000	2, 126, 000	3, 930, 000	1, 343, 000	3, 338, 000	1, 934, 000

PROJECTED ³

1968.....	5, 595, 000	3, 314, 000	2, 280, 000	4, 164, 000	1, 431, 000	3, 582, 000	2, 012, 000
1969.....	5, 698, 000	3, 350, 000	2, 348, 000	4, 235, 000	1, 463, 000	3, 688, 000	2, 010, 000
1970.....	5, 908, 000	3, 448, 000	2, 460, 000	4, 385, 000	1, 523, 000	3, 863, 000	2, 045, 000
1971.....	6, 177, 000	3, 579, 000	2, 598, 000	4, 577, 000	1, 600, 000	4, 077, 000	2, 100, 000
1972.....	6, 483, 000	3, 729, 000	2, 754, 000	4, 797, 000	1, 686, 000	4, 319, 000	2, 164, 000
1973.....	6, 789, 000	3, 880, 000	2, 909, 000	5, 016, 000	1, 773, 000	4, 562, 000	2, 227, 000
1974.....	7, 075, 000	4, 017, 000	3, 058, 000	5, 219, 000	1, 856, 000	4, 794, 000	2, 281, 000
1975.....	7, 351, 000	4, 148, 000	3, 203, 000	5, 415, 000	1, 937, 000	5, 020, 000	2, 331, 000
1976.....	7, 603, 000	4, 265, 000	3, 338, 000	5, 591, 000	2, 011, 000	5, 232, 000	2, 371, 000
1977.....	7, 825, 000	4, 362, 000	3, 463, 000	5, 746, 000	2, 079, 000	5, 423, 000	2, 402, 000

¹ Attendance status for 1957 through 1961 and for 1966 and 1967 is estimated from first-term enrollment by attendance status reported in comprehensive enrollment surveys, 1959, 1961, and 1966.

² Estimate based on 1966 and 1967 opening fall surveys of total degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from the 1966 comprehensive survey of total degree-credit and total non-degree-credit enrollment reported separately.

³ The projection of total degree-credit enrollment in 4-year institutions by sex and institutional control is based on the assumption that enrollment in these institutions, expressed as a percentage of population aged 18-21 years, will follow the 1957-67 trend to 1977 in each enrollment category.

The projection of total degree-credit enrollment in 4-year institutions by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in the 1966 comprehensive

enrollment survey, with minor adjustments, will remain constant to 1977.

Veterans attending college through aid provided by Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first-term 1957 through 1963; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE 10.—Total degree-credit enrollment in 2-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1957 to 1977

[Resident and extension opening fall enrollment]

Year (fall)	Total degree-credit enrollment	Sex		Attendance status ¹		Control	
		Men	Women	Full time	Part time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	369, 162	237, 679	131, 483	206, 000	163, 000	315, 990	53, 172
1958.....	385, 609	248, 040	137, 569	215, 000	171, 000	330, 881	54, 728
1959.....	409, 715	259, 754	149, 961	226, 000	184, 000	355, 967	53, 748
1960.....	451, 333	282, 155	169, 178	247, 000	205, 000	392, 310	59, 023
1961.....	517, 925	320, 156	197, 769	293, 000	225, 000	456, 381	61, 544
1962.....	589, 529	365, 624	223, 905	317, 193	272, 336	519, 257	70, 272
1963.....	624, 789	386, 660	238, 129	327, 218	297, 571	551, 308	73, 481
1964.....	710, 868	439, 509	271, 359	396, 385	314, 483	620, 859	90, 009
1965.....	841, 437	521, 846	319, 591	495, 454	345, 983	737, 890	103, 547
1966 ²	945, 000	577, 000	367, 000	568, 000	377, 000	840, 000	105, 000
1967 ²	1, 075, 000	653, 000	422, 000	630, 000	445, 000	967, 000	109, 000

PROJECTED ³

1968.....	1, 164, 000	705, 000	458, 000	681, 000	483, 000	1, 047, 000	117, 000
1969.....	1, 207, 000	730, 000	477, 000	706, 000	501, 000	1, 087, 000	121, 000
1970.....	1, 273, 000	768, 000	505, 000	745, 000	529, 000	1, 147, 000	127, 000
1971.....	1, 353, 000	815, 000	539, 000	791, 000	562, 000	1, 219, 000	134, 000
1972.....	1, 442, 000	866, 000	576, 000	843, 000	600, 000	1, 300, 000	142, 000
1973.....	1, 533, 000	919, 000	614, 000	895, 000	637, 000	1, 382, 000	150, 000
1974.....	1, 619, 000	969, 000	650, 000	945, 000	674, 000	1, 461, 000	158, 000
1975.....	1, 705, 000	1, 019, 000	686, 000	995, 000	710, 000	1, 539, 000	166, 000
1976.....	1, 785, 000	1, 065, 000	720, 000	1, 041, 000	743, 000	1, 612, 000	173, 000
1977.....	1, 859, 000	1, 107, 000	751, 000	1, 084, 000	775, 000	1, 679, 000	180, 000

¹ Attendance status for 1957 through 1961 and for 1966 and 1967 is estimated from first-term enrollment by attendance status reported in comprehensive enrollment surveys, biennially, 1957 through 1963, and 1966.

² Estimate based on 1966 and 1967 opening fall surveys of total degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from the 1966 comprehensive survey of total degree-credit and total nondegree-credit enrollment reported separately.

³ The projection of total degree-credit enrollment in 2-year institutions by sex and institutional control is based on the assumption that enrollment in these institutions, expressed as a percentage of population aged 18-21 years, will follow the 1957-67 trend to 1977 in each enrollment category.

The projection of total degree-credit enrollment in 2-year institutions by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in the 1966 comprehensive

survey, with minor adjustments, will remain constant to 1977. Veterans attending college through aid provided by the Veteran's Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first-term 1957 through 1963; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE 11.—Total degree-credit enrollment in all institutions of higher education, by level and institutional type: United States, fall 1957 to 1977¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Total degree-credit enrollment			Estimated total graduate (resident only) ²	Estimated total undergraduate and 1st professional		
	Total	4-year	2-year	4-year	Total	4-year	2-year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	3, 047	2, 678	369	288	2, 760	2, 391	369
1958.....	3, 236	2, 851	386	312	2, 924	2, 539	386
1959.....	3, 377	2, 968	410	331	3, 046	2, 636	410
1960.....	3, 583	3, 131	451	356	3, 227	2, 776	451
1961.....	3, 861	3, 343	518	386	3, 474	2, 956	518
1962.....	4, 175	3, 585	590	422	3, 753	3, 163	590
1963.....	4, 495	3, 870	625	464	4, 031	3, 406	625
1964.....	4, 950	4, 239	711	517	4, 433	3, 722	711
1965.....	5, 526	4, 685	841	582	4, 945	4, 103	841
1966.....	³ 5, 885	³ 4, 941	³ 945	624	5, 261	4, 317	945
1967.....	³ 6, 348	³ 5, 272	³ 1, 075	688	5, 659	4, 584	1, 075

PROJECTED⁴

1968.....	6, 758	5, 595	1, 164	749	6, 010	4, 846	1, 164
1969.....	6, 906	5, 698	1, 207	781	6, 125	4, 918	1, 207
1970.....	7, 181	5, 908	1, 273	828	6, 353	5, 080	1, 273
1971.....	7, 530	6, 177	1, 353	886	6, 644	5, 291	1, 353
1972.....	7, 925	6, 483	1, 442	952	6, 974	5, 531	1, 442
1973.....	8, 322	6, 789	1, 533	1, 019	7, 303	5, 770	1, 533
1974.....	8, 695	7, 075	1, 619	1, 085	7, 609	5, 990	1, 619
1975.....	9, 056	7, 351	1, 705	1, 152	7, 904	6, 199	1, 705
1976.....	9, 388	7, 603	1, 785	1, 217	8, 171	6, 386	1, 785
1977.....	9, 684	7, 825	1, 859	1, 279	8, 405	6, 546	1, 859

¹ Total degree-credit enrollment by level was estimated from first-term enrollment by level reported in comprehensive enrollment surveys, biennially, 1957 through 1963, and from first-professional and graduate enrollment reported separately in the 1963 comprehensive enrollment survey, and together in the 1967 opening fall enrollment survey.

² Resident students are students who take their college work on main campus or on a branch campus. Living quarters (on campus or off) and legal domicile are irrelevant.

³ Estimates based on 1966 and 1967 opening fall surveys of total degree-credit and nondegree-credit enrollment not reported separately, and on 1966 comprehensive survey of total degree-credit and total nondegree-credit enrollment reported separately.

⁴ The projection of resident graduate enrollment in 4-year institutions was made separately by sex and by institutional control and is based on the assumption that in each enrollment category the proportion of total enrollment at the graduate level will continue the 1956-67 trend to 1977.

The projection of undergraduate and first-professional degree-credit enrollment in 4-year institutions is the difference between projected total degree-credit enrollment in 4-year in-

stitutions shown in table 9 and in column 3 above, and resident graduate enrollment in 4-year institutions shown in column 5 above.

The projection undergraduate degree-credit enrollment in 2-year institutions of higher education shown in column 8 above is the same as that shown in table 10. Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projection.

For further methodological details, see appendix table A reference to table 11 and table A footnote 31.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1957 through 1963, and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

TABLE 12.—Estimated graduate degree-credit enrollment in 4-year institutions of higher education by sex, by attendance status, and by institutional control: United States, fall 1957 to 1977¹

[Resident opening fall enrollment—in thousands]

Year (fall)	Resident graduate degree-credit enrollment ²	Sex		Attendance status ³		Control	
		Men	Women	Full time	Part time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	288	208	80	113	174	145	142
1958.....	312	225	87	124	189	161	151
1959.....	331	237	94	131	200	172	159
1960.....	356	253	103	143	213	187	169
1961.....	386	273	113	162	224	208	179
1962.....	422	298	124	177	245	234	189
1963.....	464	327	137	188	276	267	196
1964.....	517	363	154	214	303	305	212
1965.....	582	409	173	254	328	352	230
1966.....	624	436	188	278	346	380	244
1967.....	688	453	236	298	390	435	254

PROJECTED⁴

1968.....	749	489	259	325	424	481	268
1969.....	781	507	273	339	442	509	272
1970.....	828	535	293	360	468	548	280
1971.....	886	569	317	386	501	595	291
1972.....	952	608	344	415	537	647	304
1973.....	1,019	648	371	444	574	702	317
1974.....	1,085	686	399	474	611	756	329
1975.....	1,152	725	427	503	649	811	341
1976.....	1,217	763	454	532	685	866	351
1977.....	1,279	798	481	560	719	919	360

¹ Graduate enrollment by sex and institutional control was estimated from first-term graduate enrollment reported in comprehensive enrollment surveys, biennially, 1957 through 1963, and from first-professional and graduate enrollment reported separately in the 1963 comprehensive enrollment survey, and together in the 1967 opening fall enrollment survey.

² Resident students are students who take their college work on main campus or on a branch campus. Living quarters (on campus or off) and legal domicile are irrelevant.

³ Graduate enrollment by attendance status was estimated from first-term graduate enrollment by attendance status reported in the 1959 and 1961 comprehensive enrollment surveys. These estimates together with similar estimates for undergraduate enrollment were adjusted to agree with total enrollment by attendance status reported in the opening fall enrollment surveys, annually, 1962 through 1967 and in the 1966 comprehensive enrollment survey.

⁴ The projection of graduate enrollment by sex and by control of institution is based on the assumption that in each enrollment category the proportion of total enrollment at the graduate level will continue the 1957-67 trend to 1977.

The projection of graduate enrollment by attendance status is based on the assumption that in each enrollment category the estimated ratio of full-time enrollment to total enrollment reported in the 1966 comprehensive enrollment survey, with minor adjustments, will remain constant to 1977. Veterans attending college through aid provided by the Veterans' Readjustment Act of 1966 are included in the trend projection.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1957 through 1963, and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

TABLE 13.—Estimated undergraduate and first-professional degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1957 to 1977¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Under-graduate degree-credit enrollment	Sex		Attendance status		Control	
		Men	Women	Full time	Part time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	2,760	1,783	976	1,964	796	1,618	1,142
1958.....	2,924	1,873	1,051	2,091	833	1,733	1,192
1959.....	3,046	1,924	1,122	2,183	863	1,812	1,234
1960.....	3,227	2,004	1,223	2,323	904	1,929	1,298
1961.....	3,474	2,135	1,339	2,552	922	2,121	1,353
1962.....	3,753	2,290	1,463	2,725	1,028	2,340	1,413
1963.....	4,031	2,446	1,585	2,881	1,151	2,581	1,450
1964.....	4,433	2,670	1,764	3,204	1,229	2,875	1,559
1965.....	4,945	2,966	1,979	3,656	1,289	3,273	1,672
1966.....	5,261	3,118	2,143	3,952	1,309	3,517	1,744
1967.....	5,659	3,347	2,312	4,261	1,398	3,870	1,789

PROJECTED²

1968.....	6,010	3,530	2,480	4,521	1,489	4,149	1,861
1969.....	6,125	3,573	2,552	4,602	1,523	4,266	1,859
1970.....	6,353	3,681	2,672	4,769	1,584	4,461	1,892
1971.....	6,644	3,824	2,820	4,983	1,661	4,702	1,942
1972.....	6,974	3,987	2,987	5,225	1,749	4,972	2,002
1973.....	7,303	4,152	3,151	5,467	1,836	5,243	2,060
1974.....	7,609	4,300	3,309	5,691	1,918	5,499	2,110
1975.....	7,904	4,441	3,463	5,906	1,998	5,748	2,156
1976.....	8,171	4,568	3,603	6,101	2,070	5,977	2,194
1977.....	8,405	4,672	3,733	6,270	2,135	6,183	2,222

¹ Estimated undergraduate and first-professional enrollment in all institutions by sex, by attendance status, and by institutional control is the sum of undergraduate enrollment in 2-year institutions (table 10) and estimated undergraduate and first-professional enrollment in 4-year institutions (table 14).

² The projection of undergraduate and first-professional degree-credit enrollment in all institutions by sex and by institutional control, is based on the assumption that in each enrollment category the proportion of total enrollment at the undergraduate level (2-year institutions) or the undergraduate and first-professional level (4-year institutions) will continue the 1957-67 trend to 1977.

The projection of undergraduate and first-professional degree-credit enrollment in all institutions by attendance status is based on the assumption that in each enrollment category the estimated ratio of full-time enrollment to total

enrollment, reported in the 1966 comprehensive enrollment survey, with minor adjustments, will remain constant to 1977. Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projection.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1967 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first-term 1967 through 1963; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

TABLE 14.—*Estimated undergraduate and first-professional degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1957 to 1977*¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Under-graduate degree-credit enrollment	Sex		Attendance status ²		Control	
		Men	Women	Full time	Part time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	2, 391	1, 546	845	1, 758	633	1, 302	1, 089
1958.....	2, 539	1, 625	914	1, 876	662	1, 402	1, 137
1959.....	2, 636	1, 664	972	1, 957	679	1, 456	1, 181
1960.....	2, 776	1, 722	1, 054	2, 077	699	1, 537	1, 239
1961.....	2, 956	1, 815	1, 141	2, 258	699	1, 665	1, 291
1962.....	3, 163	1, 924	1, 239	2, 408	755	1, 821	1, 342
1963.....	3, 406	2, 059	1, 347	2, 553	853	2, 030	1, 377
1964.....	3, 722	2, 230	1, 492	2, 808	914	2, 254	1, 469
1965.....	4, 103	2, 444	1, 659	3, 160	943	2, 535	1, 569
1966.....	4, 317	2, 541	1, 776	3, 384	933	2, 678	1, 639
1967.....	4, 584	2, 694	1, 890	3, 632	953	2, 904	1, 680
PROJECTED ³							
1968.....	4, 846	2, 825	2, 021	3, 839	1, 007	3, 102	1, 744
1969.....	4, 918	2, 843	2, 075	3, 896	1, 022	3, 179	1, 739
1970.....	5, 080	2, 913	2, 166	4, 024	1, 055	3, 314	1, 765
1971.....	5, 291	3, 009	2, 281	4, 192	1, 099	3, 483	1, 808
1972.....	5, 531	3, 121	2, 410	4, 382	1, 149	3, 672	1, 860
1973.....	5, 770	3, 233	2, 538	4, 572	1, 199	3, 861	1, 910
1974.....	5, 990	3, 331	2, 659	4, 746	1, 244	4, 038	1, 952
1975.....	6, 199	3, 423	2, 777	4, 911	1, 288	4, 209	1, 990
1976.....	6, 386	3, 502	2, 884	5, 059	1, 327	4, 366	2, 020
1977.....	6, 546	3, 565	2, 982	5, 186	1, 360	4, 504	2, 042

¹ Estimated undergraduate and first-professional enrollment in 4-year institutions by sex and institutional control is the difference between total degree-credit enrollment in 4-year institutions (table 9) and estimated graduate enrollment (table 12).

² Undergraduate and first-professional enrollment by attendance status was estimated from first-term undergraduate and first-professional enrollment by attendance status reported in comprehensive enrollment surveys, biennially, 1957 through 1963. These estimates, together with similar estimates for graduate enrollments, were adjusted to agree with total enrollment by attendance status reported in the opening fall enrollment surveys, annually, 1962 through 1967, and in the 1966 comprehensive enrollment survey.

³ The projection of undergraduate and first-professional degree-credit enrollment in 4-year institutions by sex and institutional control is based on the assumption that in each enrollment category the proportion of total enrollment at the undergraduate and first-professional level will continue the 1957-67 trend to 1977.

The projection of undergraduate and first-professional degree-credit enrollment in 4-year institutions by attendance status is based on the assumption that in each enrollment category the estimated ratio of full-time enrollment to total enrollment, reported in the 1966 comprehensive enrollment survey, with minor adjustments, will remain constant to 1977. Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projection.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1957 through 1963; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

TABLE 15.—*Total nondegree-credit enrollment in all institutions of higher education, by attendance status, and by institutional control: United States, fall 1957 to 1977*

[Resident and extension opening fall enrollment]

Year (fall)	Total non-degree-credit enrollment ¹	Attendance status ²		Control	
		Full time	Part time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)
1957.....	176, 259	73, 000	103, 000	133, 352	42, 907
1958.....	184, 000	76, 000	108, 000	140, 000	44, 000
1959.....	194, 200	80, 000	114, 000	149, 499	44, 701
1960.....	206, 000	85, 000	121, 000	161, 000	46, 000
1961.....	186, 483	77, 000	109, 000	140, 579	45, 904
1962.....	229, 000	95, 000	134, 000	179, 000	50, 000
1963.....	271, 241	112, 000	159, 000	217, 394	53, 847
1964.....	329, 847	137, 000	193, 000	288, 181	41, 666
1965.....	394, 539	163, 000	231, 000	345, 154	49, 385
1966.....	505, 000	208, 000	296, 000	452, 000	53, 000
1967.....	564, 000	233, 000	331, 000	511, 000	53, 000

PROJECTED ³

1968.....	611, 000	253, 000	358, 000	556, 000	55, 000
1969.....	635, 000	263, 000	372, 000	579, 000	56, 000
1970.....	671, 000	278, 000	393, 000	613, 000	57, 000
1971.....	713, 000	295, 000	418, 000	654, 000	59, 000
1972.....	760, 000	315, 000	446, 000	700, 000	60, 000
1973.....	808, 000	335, 000	474, 000	746, 000	62, 000
1974.....	855, 000	354, 000	501, 000	791, 000	64, 000
1975.....	901, 000	373, 000	528, 000	835, 000	66, 000
1976.....	944, 000	391, 000	553, 000	877, 000	67, 000
1977.....	984, 000	407, 000	577, 000	915, 000	69, 000

¹ Nondegree-credit enrollment by institutional control for 1957, 1959, and 1961 is from comprehensive enrollment surveys; and for 1963, 1964, and 1965, from opening fall enrollment surveys. The years 1958, 1960, and 1962 are interpolated. The years 1966 and 1967 are estimates based on 1966 and 1967 opening fall enrollment surveys of total degree-credit and nondegree-credit enrollment not reported separately, and on 1966 comprehensive survey of total degree-credit and total nondegree-credit enrollment reported separately.

² Attendance status for all years is estimated from nondegree-credit enrollment by attendance status reported in 1966 comprehensive enrollment survey.

³ The projection of total nondegree-credit enrollment by sex and institutional control, is based on the assumption that enrollment, expressed as a percentage of population aged 18-21 years, will follow the 1957-67 trend to 1977 in each enrollment category.

The projection of total nondegree-credit enrollment by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total

enrollment reported in the 1966 comprehensive enrollment survey, with minor changes, will remain constant to 1977. Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars; (1) "Opening (Fall) Enrollment in Higher Education," annually, 1963 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1957 through 1961; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE 16.—Estimated full-time equivalent of total full-time and part-time enrollment in all institutions of higher education, by degree-credit status and institutional control: United States, fall 1957 to 1977¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	All students			Students taking work creditable toward a bachelor's or higher degree			Students in occupational or general studies programs not chiefly creditable toward a bachelor's degree		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957.....	2,499	1,458	1,041	2,397	1,381	1,016	102	77	25
1958.....	2,658	1,570	1,088	2,552	1,489	1,063	106	81	25
1959.....	2,777	1,648	1,129	2,665	1,562	1,103	112	86	26
1960.....	2,954	1,760	1,194	2,835	1,667	1,168	119	93	26
1961.....	3,200	1,949	1,251	3,092	1,868	1,224	108	81	27
1962.....	3,455	2,145	1,310	3,322	2,041	1,281	133	104	29
1963.....	3,696	2,351	1,345	3,539	2,225	1,314	157	126	31
1964.....	4,115	2,671	1,444	3,924	2,504	1,420	191	167	24
1965.....	4,671	3,094	1,577	4,443	2,895	1,548	228	199	29
1966.....	5,068	3,405	1,663	4,776	3,144	1,633	292	261	30
1967.....	5,476	3,766	1,710	5,150	3,471	1,679	326	295	31
PROJECTED ²									
1968.....	5,830	4,049	1,781	5,477	3,727	1,749	353	321	32
1969.....	5,957	4,174	1,782	5,590	3,840	1,750	367	335	32
1970.....	6,194	4,378	1,816	5,806	4,024	1,783	388	355	33
1971.....	6,494	4,628	1,866	6,082	4,250	1,832	412	378	34
1972.....	6,833	4,907	1,926	6,394	4,503	1,891	440	405	35
1973.....	7,174	5,189	1,984	6,707	4,758	1,949	467	431	36
1974.....	7,494	5,458	2,035	7,000	5,001	1,999	494	457	37
1975.....	7,803	5,721	2,082	7,283	5,238	2,044	521	483	38
1976.....	8,088	5,966	2,121	7,542	5,459	2,083	546	507	39
1977.....	8,340	6,189	2,151	7,772	5,660	2,112	569	529	40

¹ The estimate of full-time equivalent enrollment, 1957 to 1967, is the sum of full-time enrollment and full-time equivalent of part-time enrollment. (Full-time and part-time degree-credit enrollment is shown in table 8. Full-time and part-time nondegree-credit enrollment is shown in table 15.)

The estimate of full-time equivalent of part-time enrollment is based on the proportion of part-time enrollment found to be equivalent to full-time enrollment for degree-credit and for nondegree-credit students in the 1964 sample survey of full-time equivalent enrollment and credit hours. These equivalents were: For degree-credit enrollment, 33 percent of part-time; for nondegree-credit enrollment 28 percent of part-time.

² The projection of the full-time equivalent of part-time enrollment is based on the assumption that the 1964 percentages of part-time enrollment equivalent to full-time enrollment (33 percent for degree-credit students and 28 percent for nondegree-credit students) will remain constant to 1977. Veterans attending college through aid provided by the Veterans' Re-

adjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, 1957 through 1961; (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966; and (4) sample survey of full-time equivalent enrollments and credit hours, fall 1964 unpublished.

Chapter II.—High School Graduates and Earned Degrees

Frances E. Ryan and Nadine C. Brown

High school graduates (table 17)

The number of high school graduates increased from 1.5 million in the school year 1957-58 to an estimated 2.8 million in 1967-68, and is expected to increase to 3.7 million in 1977-78. These figures include graduates from all regular public and nonpublic high schools in the United States and graduates from the following schools not in the regular school system: Federal schools for Indians, schools on Federal installations, residential schools for exceptional children, and sub-collegiate departments of colleges and universities. These schools represent about 1 percent of the public school graduates and about 3 percent of the nonpublic school graduates.

Two main sources form the basis for the figures quoted above. Graduates of regular public schools are reported each fall by the State departments of education. Graduates of regular nonpublic schools are reported in surveys of the nonpublic schools by the Office of Education. Other graduates included above are estimated from various auxiliary sources.

The number of high school graduates is not expected to increase as fast in the next 10 years as it did in the last decade. The increase between 1957-58 and 1967-68 was 82 percent. The increase between 1967-68 and 1977-78 is projected as 35 percent. This smaller increase is in line with the leveling off in the expected number of 18-year-olds. The increase in this age group was 53 percent between 1957-58 and 1967-68 but is projected to be only 20 percent between 1967-68 and 1977-78.

Projected high school graduates by sex and by control of school are shown in table 17. The projection of public high school graduates to 1977-78 is based on the assumption that, for boys and for girls separately, high school graduates expressed as a percentage of the 18-year-old population will follow the 1957-58 to 1967-68 trend. The projection of nonpublic high school graduates assumes little or no increase in the number of graduates, in line with similar assumptions regarding nonpublic enrollments.

Girls make up slightly more than half of the graduates at the present time, but the number of boys graduating has been increasing faster than the number of girls. By the early seventies, the number of boys graduating is expected to exceed the number of girls.

The number of graduates from nonpublic schools has increased very little in the past 5 years. The increase for nonpublic schools in this period was 9 percent; for public schools, 22 percent. The increases in the 1967-68 to 1977-78 period are expected to be 7 percent for nonpublic schools and 38 percent for public schools.

Earned degrees by level and sex (table 18)

Earned degree reports from individual institutions of higher education are received each fall by the Office of Education. These provide information on the number of degrees granted by level and sex and by field of concentration. They cover degrees granted during the academic year ending in June and include degrees earned in the prior summer, too late for the June graduation of that year.

Three principal levels have been reported and projected: Bachelor's including first-professional degrees, master's degrees, and doctorates. Since 1960-61, first-professional degrees have been reported separately from bachelor's degrees but the definitions of what constitutes a first-professional degree have not been uniform throughout the period. For that reason, no attempt has been made to project them separately. (See table 0 in the appendix for a comparison of these definitions.) Some of the changes shift degrees from the bachelor's and first-professional level to the master's level but the numbers are so small that, although individual fields show large dislocations (for example, library science and social work), the totals at each level are not greatly affected.

Earned degrees for each sex at all levels—bachelor's and first-professional, master's and doctor's—have shown large increases in the last 10 years. The estimated increases were: Bachelor's degrees, over 85 percent; master's degrees and doctor's degrees, each over 100 percent. Growth rates are expected to be maintained at or near the same levels during the next 10 years for the

master's and the doctorate degree levels. The rate for the bachelor's and first-professional degree level is expected to be more than 40 percent.

The total number of bachelor's and first-professional degrees granted annually rose from 364,000 in 1957-58 to an estimated 685,000 in 1967-68, and is expected to be 980,000 in 1977-78. The proportion granted to women rose from 34 percent of the total granted in 1957-58 to an estimated 41 percent in 1967-68 and, on the basis of this trend, is expected to increase to 46 percent in 1977-78.

The number of master's degrees rose from 66,000 in 1957-58 to an estimated 149,000 in 1967-68 and is expected to reach 274,000 in 1977-78. The proportion of master's degrees granted to women was 34 percent in 1965-66 and is expected to remain at about this level during the next 12 years.

The annual output of doctor's degrees increased from 8,900 in 1957-58 to an estimated 22,200 in 1967-68 and is expected to be 43,900 in 1977-78. The proportion of doctor's degrees granted to women was 12 percent in 1965-66 and is expected to remain near this level during the next 12 years.

The projected degrees by level and sex are shown in table 18. Each level was projected separately for men and for women. The main assumption underlying these projections is that the relationships between college-age population and the number of degrees granted at each of the three levels during the 1968-69 to 1977-78 period will continue the 1957-58 through 1965-66 trend. The trend for an increasing percentage of the college-age population to complete undergraduate requirements and continued on for advanced degrees, is reflected in the degree projections presented here. Further details on the methodology may be found in appendix table B.

Earned degrees by level and field (tables 19-22)

The fields presented are divided into two main groups at each level. These groups are (a) natural sciences and related professions and (b) social sciences, humanities, and related professions. The fields included in both groups and the percentage distribution of degrees by level and field for years 1957-58, 1967-68, and 1977-78 are shown in table 19.

The projected number of earned degrees by level and field are shown in tables 20, 21, and 22. These projections (with the exception of first-professional degrees in the health fields) are based on the assumption that the percentage distribution of degrees by field for each level will continue the 1957-58 to 1965-66 trend. For example, if the proportion of total degrees granted in a particular field has been increasing, it is assumed that it will continue to increase. The proportions thus projected, which are summarized in table 19, were applied to the projected total number of degrees for the corresponding level shown in table 18. Separate projections were made for men and for women.

First-level degrees by field (table 20)

In 1957-58, about one-fourth of all first-level degrees (bachelor's and first-professional degrees) were awarded in the fields of study constituting the natural sciences and related professions. The remaining three-fourths were awarded in the social sciences, humanities, and related professions. These proportions are expected to change little between 1957-58 and 1977-78.

The total number of first-level degrees granted in the natural sciences rose from 105,000 in 1957-58 to an estimated 168,000 in 1967-68 and is expected to be 236,000 in 1977-78. First-level degrees granted in the social sciences, humanities, and related professions rose from 259,000 in 1957-58 to an estimated 517,000 in 1967-68, and are expected to total 744,000 in 1977-78.

First-level degrees by the field of study in which they were awarded are shown in table 20. The two fastest growing fields of study at this level are mathematics including statistics, and foreign languages. The number of degrees in the field of agriculture and forestry are expected to decrease, while engineering and philosophy including religion show little change. All other fields show moderate to large increases. Dislocations between bachelor's and master's degrees in the fields of library science and social work caused by the change in definitions make the projections of first-level degrees in these two fields unreliable. For a summary of these changes, see appendix table O.

Second level degrees by field (table 21)

The proportion of second-level degrees awarded in the natural sciences and related professions is expected to rise from one-fourth of all second-level degrees in 1957-58 to approximately one-third in 1977-78. Conversely, the proportion of these degrees awarded in the social sciences, humanities, and related professions is expected to drop from three-fourths in 1957-58 to two-thirds in 1977-78.

The total number of second-level degrees awarded in the natural sciences and related professions rose from 15,000 in 1957-58 to an estimated 38,000 in 1967-68 and is expected to be 85,000 by 1977-78. Second-level degrees in the group of fields composed of the social sciences, humanities, and related professions rose from 50,000 in 1957-58 to an estimated 111,000 in 1967-68 and are expected to rise to 188,000 by 1977-78.

Second-level degrees by the fields in which they were awarded are shown in table 21. The two fastest growing fields at this level are mathematics including statistics, and engineering, although all natural sciences except agriculture and forestry showed large increases. Large increases in the fields of library science and social work are attributable to the 1965-66 redefinition of first-professional degrees. This renders projections in these two fields, at this level, unreliable.

Master's degrees in education are expected to increase only moderately between 1967-68 and 1977-78. This is because the number of degrees in education does not reflect the total number of persons preparing to teach. Prospective teachers earning degrees with majors in subject fields such as mathematics, sciences, English, and history are included with the appropriate subject fields rather than in education. The actual number of prospective teachers with majors in subject fields has shown large increases recently.

Doctor's degrees by field (table 22)

One-half of all doctor's degrees awarded in 1957-58 were in the subject fields which make up the natural sciences and related professions. This proportion is expected to rise to 55 percent by 1977-78. The remaining doctor's degrees will be awarded in the group of subject fields included under the social sciences, humanities, and related professions.

The total number of doctor's degrees granted in the natural sciences and related professions rose from 4,200 in 1957-58 to an estimated 11,300 in 1967-68 and is expected to be 24,300 in 1977-78. Doctor's degrees granted in the social sciences, humanities, and related professions rose from 4,800 in 1957-58 to an estimated 10,900 in 1967-68 and are expected to be 19,600 by 1977-78.

Doctor's degrees by area of specialization are shown in table 22. The two fastest growing subject fields were engineering and mathematics including statistics. Health professions and library science were the only fields of study with no increase in doctor's degrees expected in 1977-78 over 1967-68.

Figure 3. — High school graduates: United States, 1957-58 to 1977-78

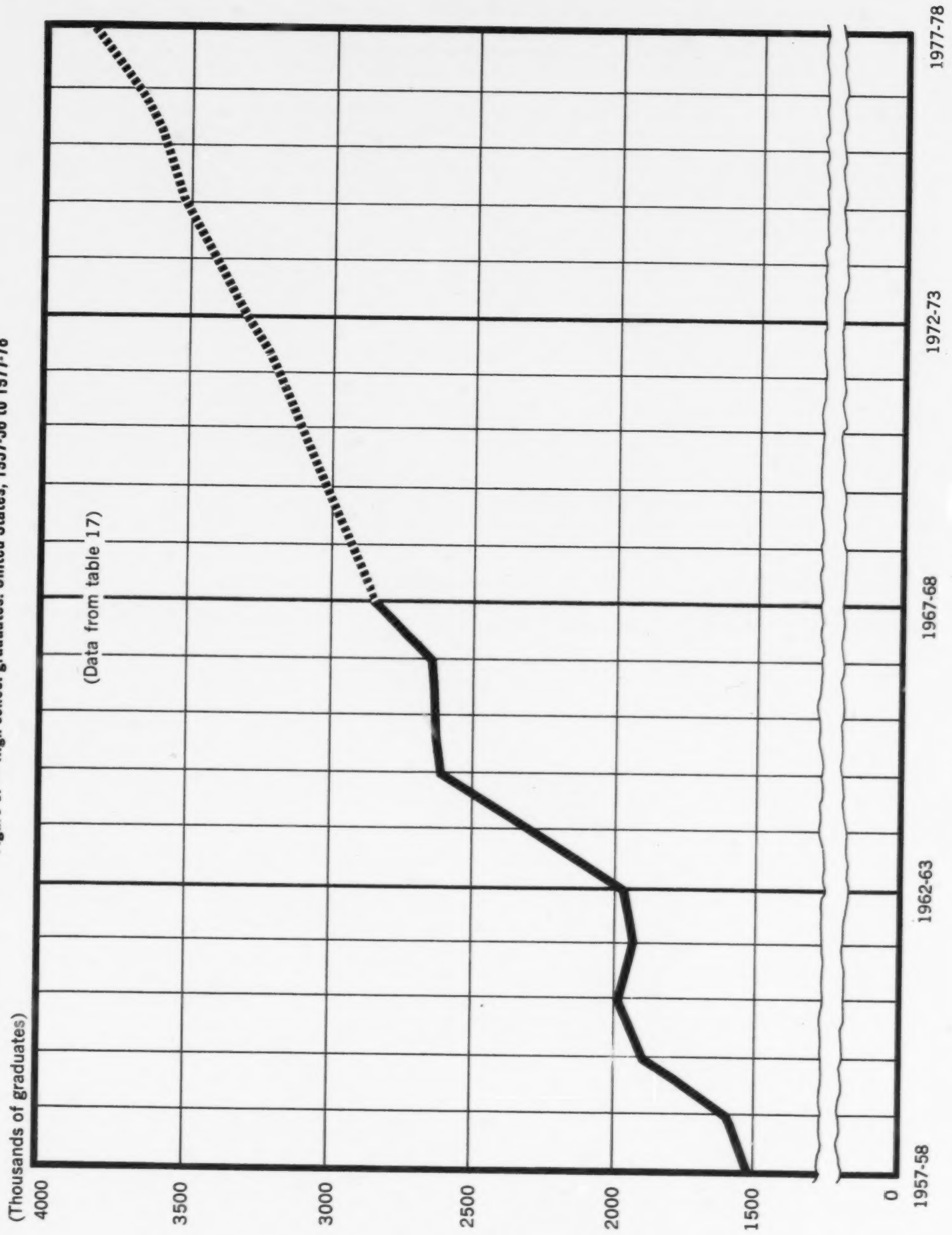


Figure 4. — Earned degrees, by level: United States, 1957-58 to 1977-78

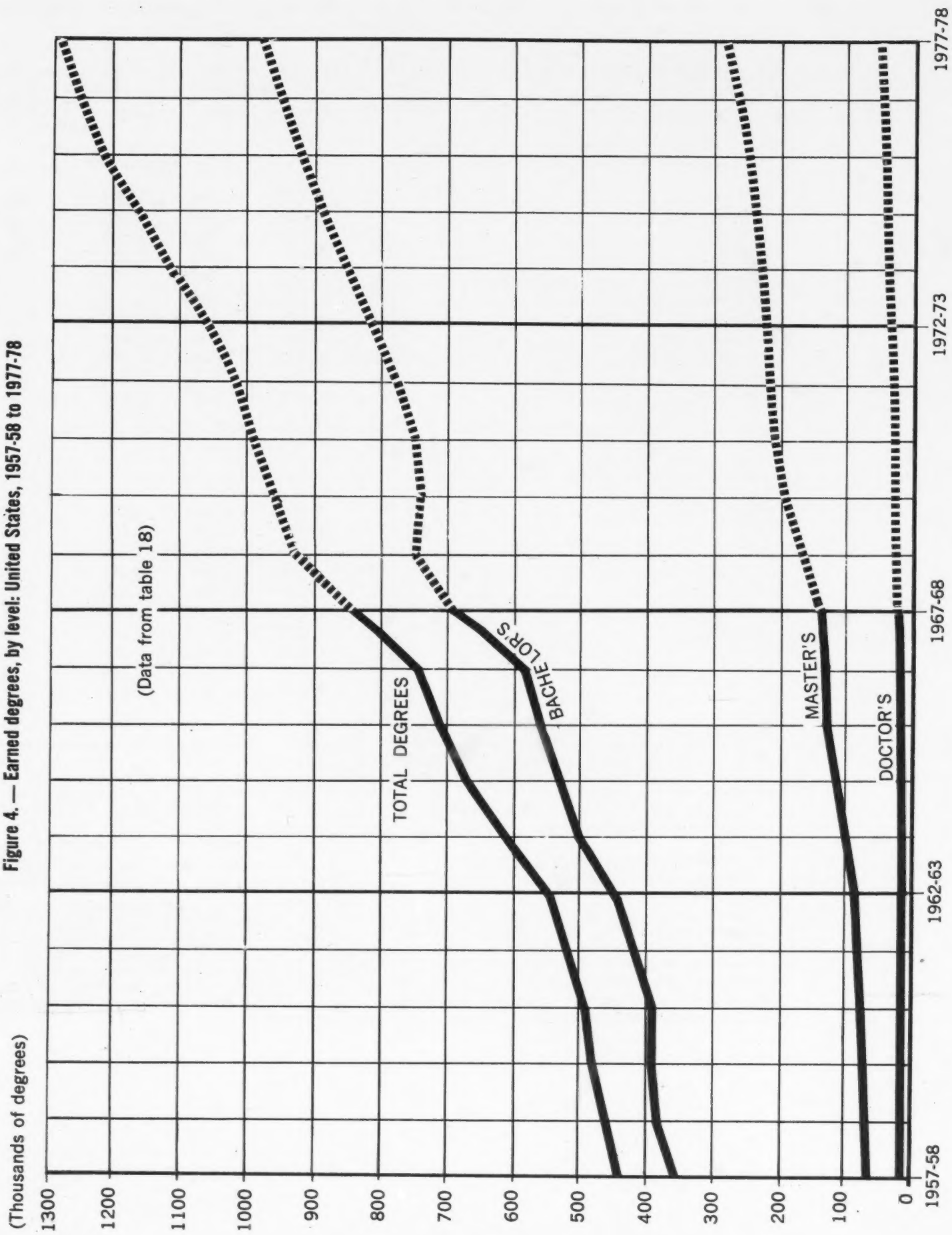


TABLE 17.—High school graduates, by sex and by institutional control: United States, 1957-58 to 1977-78

[In thousands]

Year	Total high school graduates ¹	Sex		Control ²	
		Boys	Girls	Public	Private (estimated)
(1)	(2)	(3)	(4)	(5)	(6)
1957-58	1,513	729	784	1,344	169
1958-59	1,639	790	849	1,447	192
1959-60	1,864	898	966	1,633	³ 231
1960-61	1,971	958	1,013	1,732	239
1961-62	1,925	941	984	1,685	240
1962-63	1,950	959	991	1,717	³ 233
1963-64	2,290	1,123	1,167	2,015	³ 275
1964-65	2,665	1,314	1,351	2,366	³ 298
1965-66	2,672	1,326	1,346	2,374	298
1966-67	2,680	1,332	1,348	⁴ 2,381	298
1967-68 ⁵	2,759	1,373	1,386	2,458	300
PROJECTED ⁶					
1968-69	2,881	1,435	1,446	2,571	310
1969-70	3,015	1,503	1,512	2,695	320
1970-71	3,134	1,563	1,571	2,814	320
1971-72	3,238	1,618	1,620	2,918	320
1972-73	3,331	1,667	1,664	3,011	320
1973-74	3,428	1,716	1,712	3,108	320
1974-75	3,515	1,761	1,754	3,195	320
1975-76	3,574	1,792	1,782	3,255	320
1976-77	3,642	1,829	1,813	3,322	320
1977-78	3,713	1,870	1,843	3,393	320

¹ Includes regular public and nonpublic schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians and schools on Federal installations.

² More than 99 percent of public school graduates and 97 percent of nonpublic school graduates are graduates of regular day schools.

³ Actual data from Office of Education surveys.

⁴ Preliminary data from State departments of education.

⁵ Estimated.

⁶ The projection of public high school graduates is based on the assumptions: (1) The number of boys graduating, expressed as a percent of the number of boys in the population averaging 18 years of age, will follow the 1957-58 to 1966-67 trend; and (2) the number of girls graduating, expressed as a percent of the number of girls in the population averaging 18 years of age will follow the 1957-58 to 1966-67 trend.

The projection of nonpublic high school graduates is based on the assumptions: (1) the number of nonpublic high school graduates will remain approximately the same throughout the projection period; and (2) the percent of boys among nonpublic high school graduates (48.1 percent in 1964-65) will remain constant to 1977-78.

For further methodological details, see appendix table B.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: High school graduate data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," annually, fall 1964 through 1967; (2) "Statistics of State School Systems," 1957-58; (3) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; and (4) "Nonpublic School Enrollments in Grades 9-12, Fall 1964, and Graduates, 1963-64."

TABLE 18.—*Earned degrees, by level and by sex of student: United States, 1957-58 to 1977-78*

Year	Bachelor's and 1st-professional degrees ¹			Master's degrees (except 1st professional) ²			Doctor's degrees (except 1st professional) ³		
(1)	Total (2)	Men (3)	Women (4)	Total (5)	Men (6)	Women (7)	Total (8)	Men (9)	Women (10)
1957-58	363,502	241,560	121,942	65,586	44,229	21,357	8,942	7,978	964
1958-59	382,904	253,488	129,416	69,559	47,389	22,170	9,360	8,371	989
1959-60	392,440	254,063	138,377	74,435	50,898	23,537	9,829	8,801	1,028
1960-61	398,710	254,215	144,495	78,228	54,129	24,099	10,575	9,463	1,112
1961-62	417,846	260,531	157,315	84,855	58,686	26,169	11,622	10,377	1,245
1962-63	447,622	273,169	174,453	91,366	62,911	28,455	12,822	11,448	1,374
1963-64	498,654	298,046	200,608	101,050	68,969	32,081	14,490	12,955	1,535
1964-65	535,031	317,669	217,362	112,124	76,161	35,963	16,467	14,692	1,775
1965-66	551,040	328,853	222,187	140,555	93,063	47,492	18,237	16,121	2,116
1966-67 ⁴	584,000	345,000	239,000	147,300	97,900	49,400	19,800	17,500	2,300
1967-68 ⁴	685,000	401,000	283,000	148,800	99,300	49,500	22,200	19,700	2,600
PROJECTED ⁵									
1968-69	749,000	435,000	314,000	160,000	107,100	52,900	25,100	22,200	2,900
1969-70	746,000	429,000	317,000	190,400	128,000	62,400	26,500	23,500	3,000
1970-71	760,000	433,000	327,000	211,000	142,300	68,600	27,000	23,900	3,100
1971-72	785,000	443,000	342,000	212,000	143,400	68,600	29,200	25,900	3,300
1972-73	821,000	459,000	361,000	217,700	147,700	70,100	34,900	31,000	3,900
1973-74	860,000	477,000	383,000	226,900	154,300	72,600	38,900	34,600	4,400
1974-75	898,000	493,000	405,000	239,500	163,200	76,300	39,300	34,900	4,400
1975-76	931,000	508,000	424,000	253,200	172,800	80,400	40,600	36,100	4,500
1976-77	955,000	519,000	436,000	263,700	180,100	83,600	42,000	37,300	4,700
1977-78	980,000	530,000	450,000	273,700	186,800	86,900	43,900	39,000	4,900

¹ The definition of degrees considered as first-professional is not the same for all years. For a comparison of changing definitions over the past 10 years, see appendix table 0.

² Beginning 1965-66, master's degrees include some degrees previously considered as first-professional. For detailed changes, see appendix table 0.

³ Doctor's degrees include Ph. D. in any field as well as such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering). They exclude degrees defined as first-professional, such as doctor of jurisprudence,

doctor of medicine, doctor of dental surgery, doctor of veterinary medicine, and doctor of divinity.

⁴ Estimated. The earned degree report for 1966-67 was received too late for inclusion in these tables.

⁵ The projection of earned degrees is based on the assumption that the percentage of degrees to population for each level and sex will continue the 1957-58 to 1965-66 trends. (Age of the population at the time of graduation for the first level was assumed to be 22 years; for the second level, 24 years; for the doctorate level, 27 years.)

For further methodological details, see appendix table B.

NOTE.—Data include 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Degree data from U.S. Department of Health, Education, and Welfare, Office of Education publications on "Earned Degrees Conferred by Institutions of Higher Education," 1957-58 through 1965-66.

TABLE 19.—Percentage distribution of earned degrees, by field of study and level: United States, 1957-58 to 1977-78

A. NATURAL SCIENCES AND RELATED PROFESSIONS

Year	Total number of degrees	Total natural sciences	Mathematics and statistics ¹	Engineering	Physical sciences ²	Biological sciences ³	Agriculture and forestry	Health professions ⁴	Science, general program
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Bachelor's and 1st professional									
1957-58.....	363,502	28.8	1.9	9.7	3.9	3.9	2.3	6.6	0.5
1967-68 ⁵	685,000	24.5	4.2	6.0	3.0	5.0	1.2	4.5	.5
1977-78 ⁶	980,000	24.1	6.6	4.1	2.7	5.5	.3	4.2	.6
Master's									
1957-58.....	65,576	23.3	1.9	8.8	4.6	2.8	2.3	2.6	0.3
1967-68 ⁵	149,000	25.3	4.2	10.4	3.6	3.1	1.3	2.0	.7
1977-78 ⁶	274,000	31.1	6.8	13.4	3.7	3.5	.3	1.9	1.5
Doctor's (except 1st professional)									
1957-58.....	8,942	46.7	2.8	7.2	18.6	12.6	3.9	1.6	.0
1967-68 ⁵	23,100	51.0	4.7	14.1	16.3	11.3	3.3	1.2	.1
1977-78 ⁶	42,900	55.2	6.3	20.4	14.7	10.5	2.6	.6	.1

B. SOCIAL SCIENCES, HUMANITIES, AND RELATED PROFESSIONS

Year	Total number of degrees	Total social sciences and humanities	Fine arts ⁷	Philosophy and religion ⁸	English and journalism	Foreign languages ⁹	Psychology	Social sciences ¹⁰	Education	Library sciences	Social work	Other ¹¹
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Bachelor's and 1st professional												
1957-58....	363,502	71.2	5.7	1.9	5.3	1.2	1.9	12.8	17.9	0.5	0.5	23.5
1967-68 ⁵ ...	685,000	75.4	5.8	1.5	8.1	3.1	3.3	17.6	17.1	.1	.4	18.4
1977-78 ⁶ ...	980,000	75.9	5.3	1.2	10.2	4.7	4.1	20.4	16.0	.2	.6	13.3
Master's												
1957-58....	65,576	76.7	6.3	1.2	3.9	1.6	1.9	8.0	43.0	0.2	0.2	10.4
1967-68 ⁵ ...	149,000	74.7	5.8	.9	5.1	2.9	2.4	9.7	29.8	2.8	2.7	12.6
1977-78 ⁶ ...	274,000	68.9	5.2	.4	6.6	4.0	3.0	11.7	19.6	3.0	2.6	12.8
Doctor's (except 1st professional)												
1957-58....	8,942	53.3	3.3	2.5	3.7	2.5	6.4	12.8	17.1	0.2	0.2	4.6
1967-68 ⁵ ...	23,100	49.0	3.2	1.9	3.9	2.8	6.5	11.6	14.5	.1	.4	4.1
1977-78 ⁶ ...	42,900	44.8	3.3	1.6	4.0	2.5	6.1	10.8	12.4	.0	.5	3.6

See footnotes next page.

TABLE 19.—Continued.

¹ Includes mathematics, statistics, and computer systems.
² Includes astronomy, chemistry, earth sciences, meteorology, physics, and other physical sciences.

³ Includes anatomy, bacteriology, biochemistry, biology, botany, entomology, physiology, zoology, and other biological sciences.

⁴ Includes dentistry, medicine and osteopathy, nursing, optometry, pharmacy, public health, veterinary medicine, and other health professions.

⁵ Estimated.

⁶ The projection of degrees by subject field, excluding 1st-professional degrees in the health professions, is based on the assumption that the percent distribution of degrees by field for each level and sex will continue the 1957-58 to 1965-66 trends. Projections of 1st-professional degrees in the health fields, based on estimates of expanding facilities for training together with data on student applications in excess of present capacity, were obtained from Health Manpower Statistics Branch, Health Statistics Division, National Center for Health Statistics.

For methodological details, see appendix table B; for complete classification of degrees by field, see appendix table N.

⁷ Includes architecture, music, speech and dramatic arts, and other fine and applied arts.

⁸ Includes philosophy, scholastic philosophy, religious education and Bible, and other religious fields.

⁹ Includes classical languages, French, German, Russian, other Slavic languages, and other languages and language programs.

¹⁰ Includes anthropology, economics, geography, history, international relations, political science, public administration, sociology, and other social sciences.

¹¹ Includes business and commerce; home economics; law; military, naval, or Air Force science; theology; and miscellaneous and unclassified fields.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare: (1) Office of Education publications, "Earned Degrees Conferred by Institutions of Higher Education," annually, 1957-58 through 1965-66; and (2) National Center for Health Statistics unpublished estimates of degrees in health professions, 1966-67 through 1977-78.

TABLE 20.—*Earned bachelor's and first-professional degrees, by field of study: United States, 1957-58 to 1977-78*

A. NATURAL SCIENCES AND RELATED PROFESSIONS								
Year (1)	Total (2)	Mathematics and statistics ¹ (3)	Engineering (4)	Physical sciences ² (5)	Biological sciences ³ (6)	Agriculture and forestry (7)	Health professions ⁴ (8)	Science, gen- eral program (9)
1957-58	104,623	6,905	35,191	14,317	14,308	8,223	23,837	1,842
1958-59	111,654	8,980	37,988	15,409	15,039	8,128	24,201	1,909
1959-60	114,706	11,399	37,679	16,007	15,576	7,484	24,455	2,106
1960-61	113,695	13,097	35,698	15,452	16,060	6,733	24,634	2,021
1961-62	115,580	14,570	34,551	15,851	16,915	6,789	24,672	2,232
1962-63	119,867	16,078	33,285	16,215	19,114	6,940	25,776	2,459
1963-64	128,701	18,624	35,013	17,456	22,723	7,115	25,259	2,511
1964-65	136,841	19,547	36,589	17,861	25,167	7,663	27,356	2,658
1965-66	138,531	20,066	35,615	17,129	26,918	8,063	28,171	2,569
1966-67 ⁵	145,570	22,910	36,400	17,890	28,810	7,850	28,860	2,850
1967-68 ⁶	167,700	28,900	41,260	20,780	34,270	8,470	30,570	3,450
PROJECTED ⁶								
1968-69	181,880	33,760	43,550	22,490	37,950	8,460	31,790	3,880
1969-70	181,980	35,630	41,630	22,070	38,140	7,600	32,940	3,970
1970-71	185,720	38,320	40,700	22,160	39,200	6,930	34,270	4,140
1971-72	191,800	41,700	40,360	22,590	40,890	6,340	35,540	4,380
1972-73	200,110	45,830	40,520	23,320	43,210	5,800	36,730	4,700
1973-74	209,110	50,330	40,700	24,130	45,760	5,230	37,930	5,030
1974-75	217,450	54,940	40,690	24,850	48,260	4,580	38,750	5,380
1975-76	225,380	59,450	40,450	25,470	50,590	3,870	39,850	5,700
1976-77	230,740	62,030	40,430	25,850	52,250	3,590	40,710	5,880
1977-78	236,160	64,690	40,350	26,220	53,970	3,290	41,570	6,070

B. SOCIAL SCIENCE, HUMANITIES AND RELATED PROFESSIONS

Year (1)	Total (2)	Fine arts ¹ (3)	Philosophy and religion ² (4)	English and journalism ³ (5)	Foreign languages ⁴ (6)	Psychology (7)	Social sciences ⁵ (8)	Education (9)	Library science (10)	Social work (11)	Other ⁶ (12)
1957-58	258,879	20,825	7,014	19,197	4,465	6,867	46,624	65,060	1,690	1,979	85,158
1958-59	271,250	21,576	6,973	20,718	4,730	7,328	48,215	69,515	1,756	2,048	88,391
1959-60	277,734	22,281	7,278	22,400	5,482	8,061	50,193	71,145	1,938	2,235	86,721
1960-61	285,015	21,895	7,426	23,976	6,473	8,460	52,192	74,028	2,000	2,513	86,052
1961-62	302,266	23,370	7,571	26,508	7,975	9,578	57,304	78,153	2,042	2,606	87,159
1962-63	327,755	25,319	8,004	30,251	9,768	10,993	65,373	82,627	2,351	3,056	90,013
1963-64	369,953	28,184	8,816	35,174	12,217	13,258	77,039	90,813	2,532	3,441	98,479
1964-65	398,190	30,385	8,751	38,880	13,926	14,676	84,231	95,667	2,880	4,011	104,783
1965-66	412,509	32,605	8,898	42,146	15,313	16,940	93,175	94,294	3,642	5,164	106,832
1966-67 ^a	438,870	34,050	9,170	45,840	17,330	18,510	100,770	99,920	3,730	5,190	110,640
1967-68 ^a	516,810	39,690	10,530	55,460	21,550	22,400	120,680	116,950	3,920	5,430	126,200

PROJECTED^a

1968-69	566,630	43,050	11,250	62,430	24,880	25,220	134,520	127,370	1,080	2,870	133,960
1969-70	563,950	42,400	10,900	63,790	26,040	25,740	136,020	126,010	1,150	3,060	128,840
1970-71	574,020	42,700	10,790	66,610	27,800	26,840	140,630	127,420	1,250	3,310	126,670
1971-72	593,010	43,640	10,840	70,570	30,080	28,390	147,510	130,750	1,360	3,630	126,240
1972-73	620,750	45,170	11,010	75,720	32,910	30,400	156,740	135,920	1,510	4,020	127,350
1973-74	651,140	46,860	11,210	81,390	36,030	32,590	166,820	141,600	1,660	4,450	128,530
1974-75	680,270	48,400	11,350	87,110	39,240	34,770	176,790	146,880	1,820	4,880	129,030
1975-76	705,890	49,630	11,420	92,480	42,330	36,840	186,120	151,130	1,980	5,300	128,660
1976-77	724,510	50,740	11,520	96,040	44,320	38,270	192,730	154,020	1,930	5,420	129,520
1977-78	743,740	51,890	11,610	99,770	46,410	39,760	199,540	157,050	1,890	5,540	130,280

See footnotes at end of table 22.

TABLE 21.—*Earned master's degrees (except first-professional), by field of study: United States, 1957-58 to 1977-78*

A. NATURAL SCIENCES AND RELATED PROFESSIONS								
Year (1)	Total (2)	Mathematics and statistics ¹ (3)	Engineering (4)	Physical sciences ² (5)	Biological sciences ³ (6)	Agriculture and forestry (7)	Health professions ⁴ (8)	Science, gen- eral program (9)
1957-58	15,267	1,234	5,788	3,030	1,852	1,480	1,660	223
1958-59	17,146	1,509	6,753	3,200	2,007	1,563	1,762	352
1959-60	18,232	1,757	7,159	3,376	2,154	1,554	1,838	394
1960-61	20,277	2,231	8,178	3,790	2,358	1,602	1,632	486
1961-62	22,224	2,680	8,909	3,925	2,642	1,763	1,632	673
1962-63	24,084	3,313	9,633	4,125	2,921	1,546	2,011	535
1963-64	26,920	3,597	10,827	4,561	3,296	1,651	2,279	709
1964-65	30,089	4,290	12,052	4,914	3,598	1,734	2,493	1,008
1965-66	33,586	5,007	13,675	4,987	4,232	2,091	2,833	761
1966-67 ⁵	36,220	5,690	14,830	5,250	4,510	2,030	2,980	930
1967-68 ⁶	37,630	6,190	15,510	5,340	4,630	1,890	3,000	1,070
PROJECTED ⁶								
1968-69	41,560	7,140	17,240	5,770	5,060	1,860	3,200	1,290
1969-70	50,790	9,070	21,210	6,910	6,120	1,990	3,780	1,710
1970-71	57,730	10,690	24,260	7,690	6,880	1,970	4,160	2,080
1971-72	59,440	11,380	25,120	7,760	7,010	1,740	4,150	2,280
1972-73	62,540	12,350	26,560	8,010	7,310	1,540	4,230	2,540
1973-74	66,710	13,560	28,480	8,380	7,730	1,340	4,380	2,840
1974-75	72,020	15,030	30,890	8,880	8,270	1,140	4,590	3,220
1975-76	77,830	16,650	33,540	9,430	8,850	910	4,820	3,630
1976-77	81,600	17,690	35,250	9,760	9,260	800	4,980	3,860
1977-78	85,300	18,690	36,860	10,050	9,650	830	5,140	4,080

B. SOCIAL SCIENCE, HUMANITIES, AND RELATED PROFESSIONS

Year (1)	Total (2)	Fine arts ¹ (3)	Philosophy and religion ² (4)	English and journalism ³ (5)	Foreign languages ⁴ (6)	Psychology (7)	Social sciences ⁵ (8)	Education (9)	Library science (10)	Social work (11)	Other ⁶ (12)
1957-58	50,319	4,158	792	2,532	1,041	1,235	5,219	28,222	157	124	6,839
1958-59	52,413	4,478	948	2,804	1,074	1,257	5,544	28,598	205	149	7,356
1959-60	56,203	4,809	919	3,192	1,156	1,406	5,965	30,424	305	239	7,788
1960-61	57,951	4,804	809	3,391	1,405	1,719	6,378	30,830	370	205	8,040
1961-62	62,631	5,182	898	3,765	1,626	1,832	7,241	32,654	521	320	8,592
1962-63	67,282	5,620	810	4,307	2,026	1,918	8,326	34,105	474	318	9,378
1963-64	74,130	6,020	946	4,807	2,391	2,059	9,395	37,171	695	393	10,253
1964-65	82,035	6,821	1,018	5,461	2,947	2,708	10,635	39,296	954	377	11,818
1965-66	106,969	8,359	1,442	6,788	3,727	3,117	12,900	45,094	12,316	12,316	17,754
1966-67 ⁷	111,110	8,650	1,430	7,350	4,100	3,370	13,890	45,560	12,411	12,411	18,610
1967-68 ⁸	111,200	8,630	1,360	7,670	4,330	3,510	14,390	44,310	12,416	12,416	18,810

PROJECTED⁹

1968-69	118,420	9,170	1,380	8,500	4,850	3,880	15,850	45,800	4,490	4,280	20,220
1969-70	139,630	10,780	1,530	10,430	6,010	4,760	19,320	52,350	5,350	5,030	24,070
1970-71	153,220	11,790	1,580	11,880	6,920	5,420	21,910	55,600	5,940	5,510	26,670
1971-72	152,510	11,700	1,480	12,280	7,220	5,590	22,510	53,490	6,000	5,460	26,780
1972-73	155,180	11,860	1,390	12,960	7,690	5,900	23,640	52,510	6,180	5,550	27,500
1973-74	160,190	12,200	1,330	13,870	8,300	6,310	25,170	52,190	6,470	5,710	28,640
1974-75	167,470	12,710	1,270	15,020	9,060	6,830	27,130	52,430	6,850	5,960	30,210
1975-76	175,340	13,260	1,200	16,290	9,890	7,390	29,280	52,630	7,280	6,220	31,900
1976-77	182,070	13,710	1,200	17,140	10,470	7,780	30,770	53,150	7,770	6,650	33,430
1977-78	188,360	14,140	1,190	17,990	11,050	8,150	32,190	53,450	8,270	7,080	34,850

See footnotes at end of table 22.

TABLE 22.—*Earned doctor's degrees (except first-professional), by field of study: United States, 1957-58 to 1977-78*

A. NATURAL SCIENCES AND RELATED PROFESSIONS

Year (1)	Total (2)	Mathematics and statistics ¹ (3)	Engineering (4)	Physical sciences ² (5)	Biological sciences ³ (6)	Agriculture and forestry (7)	Health professions ⁴ (8)	Science, gen- eral program (9)
1957-58	4,174	247	647	1,655	1,125	353	147	6
1958-59	4,400	282	714	1,812	1,045	388	153	2
1959-60	4,697	303	786	1,838	1,205	456	107	3
1960-61	5,070	344	943	1,991	1,193	463	133	1
1961-62	5,684	396	1,207	2,122	1,338	472	148	4
1962-63	6,326	490	1,378	2,380	1,455	462	157	3
1963-64	7,137	596	1,693	2,455	1,625	573	192	17
1964-65	8,316	688	2,124	2,829	1,928	557	173	11
1965-66	9,127	801	2,304	3,045	2,097	618	251	10
1966-67	10,020	910	2,650	3,270	2,260	660	260	20
1967-68	11,340	1,060	3,120	3,630	2,520	720	270	

PROJECTED *

1968-69	12,930	1,240	3,710	4,050	2,820	800	290	20
1969-70	13,780	1,350	4,100	4,240	2,950	830	290	20
1970-71	14,150	1,420	4,370	4,270	2,980	820	270	20
1971-72	15,450	1,590	4,920	4,570	3,190	870	280	30
1972-73	18,680	1,970	6,150	5,420	3,790	1,020	300	30
1973-74	21,010	2,260	7,130	5,970	4,190	1,110	310	40
1974-75	21,410	2,350	7,490	5,960	4,200	1,090	280	40
1975-76	22,290	2,500	8,000	6,090	4,300	1,100	260	40
1976-77	23,140	2,620	8,430	6,250	4,420	1,120	260	40
1977-78	24,320	2,790	8,960	6,490	4,620	1,150	260	50

B. SOCIAL SCIENCE, HUMANITIES, AND RELATED PROFESSIONS

Year (1)	Total (2)	Fine arts ¹ (3)	Philosophy and religion ² (4)	English and journalism ³ (5)	Foreign languages ⁴ (6)	Psychology (7)	Social sciences ⁵ (8)	Education (9)	Library sciences (10)	Social work (11)	Other ⁶ (12)
1957-58	4,768	292	222	335	224	572	1,144	1,529	19	18	413
1958-59	4,960	359	206	382	241	635	1,208	1,487	6	30	406
1959-60	5,132	380	233	405	232	641	1,282	1,474	19	23	443
1960-61	5,505	410	263	408	264	703	1,369	1,594	14	36	444
1961-62	5,938	425	251	493	261	781	1,391	1,737	10	32	557
1962-63	6,496	467	267	527	277	844	1,557	1,943	17	40	557
1963-64	7,353	519	285	570	379	939	1,803	2,191	13	43	611
1964-65	8,151	545	304	706	436	1,004	2,027	2,372	12	34	711
1965-66	9,110	588	360	714	518	1,206	2,155	2,711	19	64	775
1966-67	9,820	640	390	780	560	1,300	2,330	2,900	20	70	830
1967-68	10,890	720	430	870	620	1,450	2,590	3,190	20	80	920

PROJECTED *

1968-69	12,170	820	470	990	690	1,620	2,900	3,540	20	100	1,020
1969-70	12,720	860	490	1,050	720	1,700	3,040	3,670	20	110	1,060
1970-71	12,810	880	490	1,070	720	1,720	3,060	3,670	20	110	1,070
1971-72	13,720	960	520	1,150	780	1,840	3,290	3,900	20	120	1,140
1972-73	16,260	1,150	610	1,390	920	2,190	3,910	4,580	20	150	1,340
1973-74	17,940	1,280	670	1,550	1,010	2,420	4,330	5,020	20	170	1,470
1974-75	17,930	1,300	660	1,560	1,010	2,430	4,340	4,970	20	180	1,460
1975-76	18,310	1,350	670	1,620	1,030	2,480	4,440	5,030	20	190	1,480
1976-77	18,830	1,390	690	1,670	1,060	2,560	4,570	5,150	20	200	1,520
1977-78	19,620	1,450	710	1,750	1,110	2,670	4,760	5,360	20	210	1,580

See footnotes next page.

TABLE 22.—Continued.

¹ Includes mathematics, statistics, and computer science.

² Includes astronomy, chemistry, earth sciences, meteorology, physics, and other physical sciences.

³ Includes anatomy, bacteriology, biochemistry, biology, botany, entomology, physiology, zoology, and other biological sciences.

⁴ Includes dentistry, medicine and osteopathy, nursing, optometry, pharmacy, public health, veterinary medicine, and other health professions.

⁵ Estimated.

⁶ The projection of degrees by subject field, excluding 1st-professional degrees in the health professions, is based on the assumption that the percent distribution of degrees by field for each level and sex will continue the 1957-58 to 1965-66 trends. Projections of 1st-professional degrees in the health fields, based on estimates of expanding facilities for training together with data on student applications in excess of present capacity, were obtained from Health Manpower Statistics Branch, Health Statistics Division, National Center for Health Statistics.

For methodology details, see appendix table B; for complete classification of degrees by field, see appendix table N.

⁷ Includes architecture, music, speech and dramatic arts, and other fine and applied arts.

⁸ Includes philosophy, scholastic philosophy, religious education and Bible, and other religious fields.

⁹ Includes classical languages, French, German, Russian, other Slavic languages, and other languages and language programs.

¹⁰ Includes anthropology, economics, geography, history, international relations, political science, public administration, sociology, and other social sciences.

¹¹ Includes business and commerce; home economics; law, military, naval, or Air Force science; theology; and miscellaneous and unclassified fields.

¹² Effective 1965-66, master's degrees in these fields are not reported as 1st-professional degrees.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare: (1) Office of Education publications, "Earned Degrees Conferred by Institutions of Higher Education," annually, 1957-58 through 1965-66; and (2) National Center for Health Statistics unpublished estimates of degrees in health professions, 1966.

Chapter III.—Teachers

Alice R. Pool and John F. Beamer, Jr.

Classroom teachers in regular elementary and secondary day schools (table 23)

There were 1,424,000 classroom teachers in public and nonpublic day schools in fall 1957 and 2,095,000 in fall 1967. The number in fall 1977 is expected to be 2,299,000. The data for public schools which form the basis of the public school projection were furnished by State departments of education, and that for nonpublic schools by the individual nonpublic schools. Projected classroom teachers by control and level of school are shown in table 23.

The projection of teachers employed in the public schools shown in Section A of table 23 includes the additional number of teachers expected as the result of the operation of the Elementary and Secondary Education Act of 1965. This Act is expected to account for an increase in the number of teachers employed in the public schools of about 100,000 each year from 1968 through 1977. Of the increased number about one-half are expected on the basis of 1967 experience to be elementary teachers.

The projection of classroom teachers employed in public schools shown in section B of the table is based on the assumption that, in the absence of the Act, the 1957-64 trend of pupil-teacher ratios would have continued to 1977. These projections were made by dividing projected public school enrollment (table 3) by the corresponding projected public school pupil-teacher ratios in section B of table 24.

Classroom teachers in the nonpublic schools were projected in the same way as the teachers in the public schools, by using the enrollment data of table 3 and the pupil-teacher ratios of table 24. The numbers projected in section A and in section B are the same because the nonpublic schools are assumed to be unaffected by the Elementary and Secondary Education Act of 1965.

The number of classroom teachers in the secondary schools (public and nonpublic) increased from 526,000 in 1957 to 902,000 in 1967 and is expected to be 1,096,000 in 1977. In the elementary schools, the number of classroom teachers increased from 898,000 in 1957 to 1,193,000 in 1967 and is expected to be 1,203,000 in 1977. The number of secondary school teachers is increasing at a faster rate than elementary school teachers because of a larger enrollment-rate increase and a lower pupil-teacher ratio in the secondary schools, and because of the shift of public seventh and eighth grade pupils from the elementary into the secondary schools. The number of secondary school teachers in 1967 was 71 percent greater than in 1957, while the increase in the number of elementary school teachers for the same period was 33 percent.

About 87 percent of the elementary and 90 percent of the secondary school teachers were in public schools in 1967. By 1977, the public schools are expected to employ a smaller proportion of all elementary teachers (86 percent) and a larger proportion of all secondary teachers (92 percent). Two factors contribute to this change. For the elementary schools, the recent drastic decreases in pupil-teacher ratios in the nonpublic schools means that more teachers are being employed by them. Although these schools are not expected to increase their enrollments in the period 1968 to 1977, they are expected to continue their decrease in pupil-teacher ratios at a somewhat slower pace. For the secondary schools, the expected continued shift in the public schools of seventh and eighth grade elementary pupils into secondary schools increases the number of secondary school teachers and decreases the number of elementary school teachers in the public schools.

Pupil-teacher ratios in regular elementary and secondary day schools (table 24)

Public and nonpublic school pupil-teacher ratios on which the teacher projections are based are shown in table 24. The nonpublic elementary school pupil-teacher ratio decreased from 38.5 in 1957 to an estimated 30.3 in 1967 and, based on this trend, is expected to drop to 27.2 by 1977. The nonpublic secondary school pupil-teacher ratio fell from 17.9 in 1957 to an estimated 16.1 in 1967, and is expected to be 15.5 by 1977.

In the public schools, the elementary school pupil-teacher ratio decreased from 29.1 in 1957 to 26.3 in 1967, and is expected to be 24.7 in 1977. Without the benefits of the Elementary and

Secondary Education Act of 1965, the ratio projected on the basis of the 1957-64 trend (section B of table 24) would have been 25.9 in 1977. The secondary school pupil-teacher ratio increased slightly between 1957 and 1964 (from 21.3 to 21.5) but under the operation of the Elementary and Secondary Education Act dropped to 20.3 in 1967 and is expected to remain at about this level to 1977.

Demand for additional classroom teachers (table 25, 26)

The demand for public elementary and secondary school teachers not employed in the public schools in the previous year includes those needed to allow for increased enrollment and those needed for replacement of teachers leaving the profession (turnover). The demand for additional public school teachers (including returnees to the profession) to take care of both of these needs was 1,006,000 in the fall 1963 through 1967 period; it would be expected to be 861,000 in 1968 through 1972, and 816,000 in 1973 through 1977 on the basis of trend alone. Allowance for the expected impact of the Elementary and Secondary Education Act of 1965, however, will increase these totals to 912,000 and 856,000, respectively. This means that 1.8 million new teachers or returnees to the profession will be employed by the public schools during the next 10 years, 1968 through 1977. The largest number is required for turnover, which will account for over 85 percent of this demand.

The projected demand for additional public school teachers is shown in table 25. The number of teachers necessary to take care of enrollment increases was computed for each year as the difference between the total employed for the current year and the total employed for the previous year. The number for turnover was based on the assumption that 8 percent of the total classroom teachers will leave the profession temporarily or permanently each year.¹ Projection A includes the increases in classroom teachers due to the Elementary and Secondary Education Act.

The future demand for additional nonpublic school teachers is expected to be smaller than in the past 5 years because enrollment increases are expected to be smaller. About 68,000 new nonpublic school teachers or returnees to the profession were employed during fall 1963 through fall 1967. This number is expected to drop to 58,000 in 1968 through 1972, and to remain about the same in the 1973 through 1977 period. Approximately 115,000 additional nonpublic school teachers will be employed during the next 10 years, 1968 through 1977. Turnover will account for all but 15,000 of this demand.

The projected demand for additional nonpublic elementary and secondary school teachers is shown in table 26. The number for taking care of enrollment increases was computed in the same manner as for public schools, and the number for turnover is based on the assumption that 4 percent (one-half the public school rate) of the nonpublic school teachers leave the profession permanently or temporarily each year. This lower rate (4 percent) was assumed because about one-half of all nonpublic school teachers belong to religious orders where the turnover is presumably small.

Instructional staff in elementary and secondary schools (table 27)

The instructional staff in public elementary and secondary schools increased from 1,356,000 in 1957 to 2,055,000 in 1967. It is expected to be 2,216,000 in 1977 based on the 1957-64 trend, and 2,330,000 under projection A, table 27. These figures include principals, supervisors, librarians, and guidance and psychological personnel, as well as classroom teachers. Instructional staff and classroom teachers are not reported separately for nonpublic schools. It is believed that the primary responsibility of most professional personnel employed by these schools is classroom teaching; therefore, the number of instructional staff in nonpublic schools shown here is the same as the number for nonpublic school teachers.

Projected instructional staff is shown in table 27. Section A includes the expected effects of the Elementary and Secondary Education Act of 1965. It is expected that the Act will produce an increase in instructional staff in regular public day schools over the number expected on the basis of trend alone (section B). This increase is expected to be a little over 100,000 each year from 1968 through 1977.

The public school instructional staff projection in section B is based on the assumption that instructional staff as a percentage of classroom teachers will continue the 1957-64 trend. The ratio of total public school instructional staff to classroom teachers increased from 107.7 in 1957 to 110.8 in 1967 and based on trend alone would be expected to be 114.0 by 1977. These ratios were applied to the public classroom teacher figures shown in table 23 to obtain the projections

¹ Frank Lindenfeld, U.S. Department of Health, Education, and Welfare, Office of Education, "Teacher Turnover in Public Elementary and Secondary Schools, 1950-60."

in section B. Nonpublic school instructional staff was assumed to be 100 percent of the classroom teachers shown in table 23.

Total instructional staff for resident degree-credit courses in institutions of higher education (table 28)

The total full-time and part-time instructional staff for resident degree-credit courses in all institutions of higher education (table 28) increased from 259,000 in 1957-58 to an estimated 478,000 in 1967-68, and is expected to be 665,000 in 1977-78. These figures include all full-time and part-time instructors and above, plus junior instructional staff employed for instruction in resident degree-credit courses. The junior instructional staff includes assistant instructors, teaching fellows, teaching assistants, and laboratory assistants.

The data for these and other figures in this and the following sections are from biennial faculty reports from individual institutions of higher education for 1957-58 through 1963-64 and from preliminary results of the 1966 Higher Education General Information Survey. It differs from data shown last year ¹ because it covers only the 50 States and District of Columbia and excludes the outlying areas.

The total full-time and part-time instructional staff for resident degree-credit courses, shown in table 28, was projected separately for public 4-year, public 2-year, private 4-year, and private 2-year institutions and summed to obtain the total for all institutions. The projections are based on the assumption that student-staff ratios in each institutional control and type category will continue to increase as they have in the past. To obtain the projections, projected enrollments in each of the institutional control and type categories (tables 9 and 10) were divided by the projected student-staff ratios in corresponding categories. The resulting projections by institutional control and type categories are shown in tables 30 to 34 along with projections of all professional staff.

Full-time equivalent instructional staff for resident degree-credit courses in institutions of higher education (table 29)

Full-time equivalent instructional staff for resident degree-credit courses in all institutions increased from 187,000 in 1957-58 to an estimated 339,000 in 1967-68 and is expected to rise to 472,000 in 1977-78. These figures include full-time staff and the full-time equivalent of part-time instructor or above, plus the full-time equivalent of junior instructional staff. In 1963-64, in all institutions, about 80 percent of the full-time equivalent instructional staff members with the rank of instructor or above were employed on a full-time basis.

Total professional staff in institutions of higher education (table 30-34)

Total full-time and part-time professional staff in institutions of higher education is classified by primary function. The classification includes, in addition to staff for instruction in resident degree-credit courses, full-time and part-time instructional staff employed for extension courses, resident nondegree-credit courses, and instruction by mail, radio, or television. It also includes full-time and part-time professional staff employed for administration and services, and for organized research. Full-time and part-time professional staff in institutions of higher education rose from 381,000 in 1957-58 to an estimated 735,000 in 1967-68, and is expected to be 1,028,000 in 1977-78.

Projected full-time and part-time professional staff for all institutions is shown in table 30. It is based on the assumption that full-time and part-time professional staff other than that for instruction in resident degree-credit courses, as a percentage of total full-time and part-time instructional staff for resident degree-credit courses, will maintain to 1977-78 the same relationship that existed in 1963-64. The percentages used for other instructional staff, for administration and services, and for organized research differed in each of the four types of institutions and are given in the footnotes to tables 31 to 34. These tables give projections of other instructional staff, administration and services, and organized research for the four types of institutions: public 4-year, public 2-year, private 4-year, and private 2-year institutions.

Full-time equivalent professional staff in institutions of higher education (table 35)

The estimated and projected full-time equivalent of total full-time and part-time professional staff in all institutions is shown in table 35. The method of estimating and projecting full-time

¹"Projections of Educational Statistics to 1976-77" (1967 Edition) U.S. Department of Health, Education, and Welfare, Office of Education.

equivalent instructional staff for resident degree-credit courses is given in the footnotes to table 29. The 1963-64 ratio of full-time equivalent instructional staff to total full-time and part-time instructional staff for resident degree-credit courses was 0.71. The totals for full-time and part-time staff employed for instruction in courses other than resident degree-credit courses, for administration and services, and for organized research shown in table 30, were multiplied by the above ratio to obtain the full-time equivalents for this staff given in table 35.

Demand for instructional staff in institutions of higher education (table 36)

The demand for additional full-time-equivalent instructional staff in all institutions of higher education is expected to continue to increase during the next 10 years, 1968-69 through 1977-78. During the past 5 years, 1963-64 through 1967-68, the demand for additional full-time-equivalent instructional staff was 225,000. It is expected to be 211,000 in 1968-69 through 1972-73 and 243,000 in 1973-74 through 1977-78. These figures include the number needed for both increased enrollment and replacement of staff leaving the profession temporarily or permanently each year. The instructional staff includes those employed for extension courses, resident nondegree-credit courses, and instruction by mail, radio, or television, as well as the instructional staff for resident degree-credit courses.

The projected demand for additional full-time equivalent instructional staff is shown in the last three columns of table 36. It is based on the estimated and projected full-time equivalent instructional staff, and is projected as the total of staff required for increased enrollment and for replacement of those who have left the profession either temporarily or permanently. Full-time equivalent staff required for increased enrollment is computed as the difference between the total number employed in successive years. The requirements for replacement are estimated at 6 percent of the total number employed in the previous year.

It should be noted that one of the basic assumptions underlying the demand for instructional staff shown here is that the student-staff ratios will continue to increase until 1977-78. Any reversal of this trend will result in larger demands for instructional staff than those presented here.

The assumption of a 6-percent replacement rate is based on unpublished data from a 1963 Office of Education study which showed that about 5 percent of the full-time instructors and above in 4-year institutions intended to leave employment in institutions of higher education during the following year. If we estimate an additional 1 percent for mortality, the annual replacement rate is then 6 percent. If the requirement for replacement should be lower or higher than the assumed 6 percent per year, the demand for replacement of instructional staff would be altered somewhat.

Demand for professional staff in institutions of higher education (table 37)

The professional staff in institutions of higher education includes in addition to instructional staff, staff employed for general administration and services and staff employed for organized research, as shown in tables 30 and 35. The demand for additional full-time-equivalent professional staff is expected to continue to increase during the next 10 years, 1968-69 through 1977-78. During the past 5 years, 1963-64 through 1967-68, the demand for additional full-time equivalent professional staff was 296,000. It is expected to be 286,000 in 1968-69 through 1972-73 and 330,000 in 1973-74 through 1977-78. These figures include the number needed for both increased enrollment and replacement of staff leaving the profession.

Figure 5. — Classroom teachers in regular elementary and secondary day schools: United States, fall 1957 to 1977 (includes effect of Elementary and Secondary Education Act of 1965)

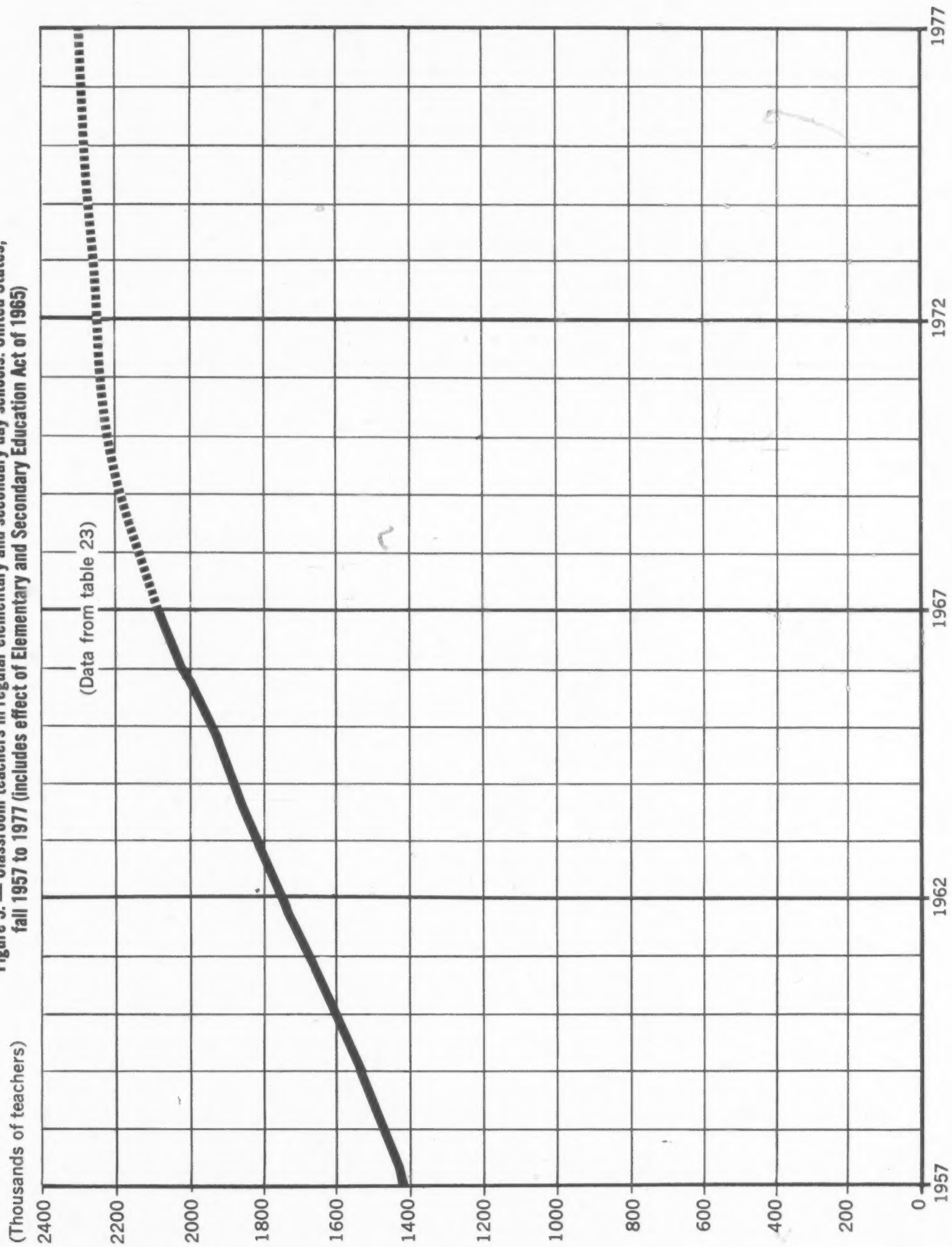


Figure 6. — Total instructional staff for resident degree-credit courses in institutions of higher education: United States, 1st term, 1957-58 to 1977-78

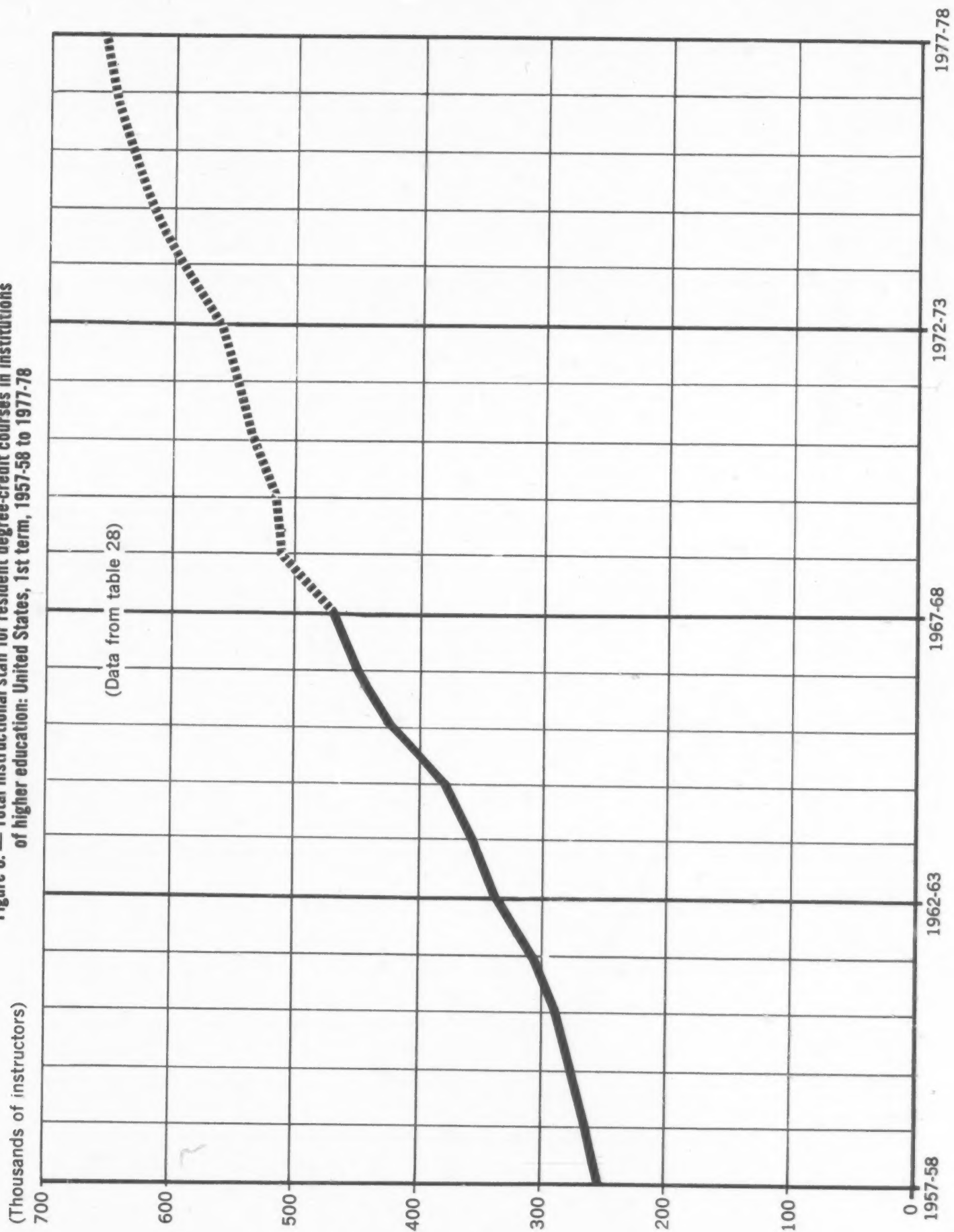


TABLE 23.—Classroom teachers in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1957 to 1977¹

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957.....	1,424	898	526	1,259	786	473	165	112	53
1958.....	1,475	931	544	1,306	815	491	169	116	53
1959.....	1,531	952	580	1,355	832	524	176	120	56
1960.....	1,600	991	609	1,408	858	550	192	133	59
1961.....	1,668	1,015	653	1,461	869	592	207	146	61
1962.....	1,727	1,036	690	1,508	886	621	219	150	69
1963.....	1,806	1,062	743	1,578	908	669	228	154	74
1964.....	1,882	1,096	786	1,648	940	708	234	156	78

A. INCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ACTUAL

1965.....	1,951	1,123	828	1,711	965	746	240	158	82
1966.....	2,028	1,159	869	1,789	1,006	783	239	153	86
1967.....	2,095	1,193	902	^a 1,855	^a 1,040	^a 815	240	153	87

PROJECTED⁴

1968.....	2,152	1,213	939	1,910	1,058	852	242	155	87
1969.....	2,183	1,215	968	1,942	1,061	881	241	154	87
1970.....	2,212	1,218	994	1,968	1,062	906	244	156	88
1971.....	2,230	1,211	1,019	1,985	1,054	931	245	157	88
1972.....	2,242	1,200	1,042	1,994	1,041	953	248	159	89
1973.....	2,256	1,200	1,064	2,006	1,031	975	250	161	89
1974.....	2,265	1,185	1,080	2,014	1,023	991	251	162	89
1975.....	2,277	1,185	1,092	2,024	1,022	1,002	253	163	90
1976.....	2,289	1,191	1,098	2,035	1,027	1,008	254	164	90
1977.....	2,299	1,203	1,098	2,044	1,038	1,006	255	165	90

See footnotes at end of table.

TABLE 23.—Classroom teachers in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1957 to 1977 ¹—Continued

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

B. EXCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ESTIMATED ³

1965.....	1,923	1,117	806	1,683	959	724	240	158	82
1966.....	1,963	1,132	831	1,724	979	745	239	153	86
1967.....	2,007	1,149	858	1,767	996	771	240	153	87

PROJECTED ⁴

1968.....	2,052	1,163	889	1,810	1,008	802	242	155	87
1969.....	2,083	1,165	918	1,842	1,011	831	241	154	87
1970.....	2,112	1,168	944	1,868	1,012	856	244	156	88
1971.....	2,130	1,161	969	1,885	1,004	881	245	157	88
1972.....	2,142	1,150	992	1,894	991	903	248	159	89
1973.....	2,156	1,142	1,014	1,906	981	925	250	161	89
1974.....	2,165	1,135	1,030	1,914	973	941	251	162	89
1975.....	2,177	1,135	1,042	1,924	972	952	253	163	90
1976.....	2,189	1,141	1,048	1,935	977	958	254	164	90
1977.....	2,199	1,153	1,046	1,944	988	956	255	165	90

¹ Includes full-time and part-time classroom teachers (in 1967, 98 percent of teachers in the public schools were full time). Does not include teachers in independent nursery and kindergarten schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Instructional staff and classroom teachers are not reported separately. Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Preliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

⁴ The projection of classroom teachers in public schools, including the effect of the Elementary and Secondary Education Act of 1965, assumes an additional increase in classroom teachers of 50,000 each year at each level over the number projected under the 1957-64 trend assumptions. This increase is based on 1967 experience as well as on the amount of funds made available by provisions of the Act.

The projection of classroom teachers in nonpublic schools is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1957-65 trends to 1977, with the restrictions that the elementary ratios will not go below 26 and the secondary ratios will not go below 15

pupils per teacher.

⁵ Estimated, using the 1957-64 trend.

⁶ The projection of classroom teachers in public schools, excluding the effect of the Elementary and Secondary Education Act of 1965, is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1957-64 trend to 1977.

The projection of classroom teachers in nonpublic schools is assumed to be unaffected by the Elementary and Secondary Education Act of 1965.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Classroom teacher data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1967; (2) "Enrollment, Teachers, and School-housing," fall 1957 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (6) "Statistics of Nonpublic Secondary Schools, 1960-61".

Table 24.—*Pupil-teacher ratios in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1957 to 1977*¹

Year (fall)	Public		Nonpublic (estimated) ²	
	Elementary	Secondary	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)
1957.....	29.1	21.3	38.5	17.9
1958.....	28.7	21.7	38.7	18.2
1959.....	28.7	21.5	38.8	18.5
1960.....	28.4	21.7	36.0	18.3
1961.....	28.3	21.7	33.3	18.0
1962.....	28.5	21.7	32.8	17.7
1963.....	28.4	21.5	32.3	17.4
1964.....	27.9	21.5	31.8	17.1

A. INCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ACTUAL				
1965.....	27.6	20.8	31.3	16.7
1966.....	26.9	20.3	30.8	16.4
1967.....	26.3	20.3	30.3	16.1

PROJECTED ⁴				
1968.....	26.0	20.1	29.7	16.3
1969.....	25.9	20.2	29.2	16.1
1970.....	25.7	20.2	28.9	16.0
1971.....	25.5	20.3	28.6	15.9
1972.....	25.4	20.3	28.3	15.8
1973.....	25.2	20.3	28.0	15.7
1974.....	25.1	20.3	27.8	15.7
1975.....	24.9	20.3	27.6	15.6
1976.....	24.7	20.3	27.4	15.5
1977.....	24.7	20.3	27.2	15.5

See footnotes at end of table.

Table 24.—Pupil-teacher ratios in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1957 to 1977¹—Continued

Year (fall) (1)	Public		Nonpublic (estimated) ²	
	Elementary (2)	Secondary (3)	Elementary (4)	Secondary (5)

B. EXCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ESTIMATED³

1965.....	27. 8	21. 4	31. 3	16. 7
1966.....	27. 7	21. 4	30. 8	16. 4
1967.....	27. 5	21. 4	30. 3	16. 1

PROJECTED⁴

1968.....	27. 3	21. 4	29. 7	16. 3
1969.....	27. 2	21. 4	29. 2	16. 1
1970.....	27. 0	21. 4	28. 9	16. 0
1971.....	26. 8	21. 4	28. 6	15. 9
1972.....	26. 7	21. 4	28. 3	15. 8
1973.....	26. 5	21. 4	28. 0	15. 7
1974.....	26. 4	21. 4	27. 8	15. 7
1975.....	26. 2	21. 4	27. 6	15. 6
1976.....	26. 0	21. 4	27. 4	15. 5
1977.....	25. 9	21. 4	27. 2	15. 5

¹ Includes full-time and part-time classroom teachers (in 1967, 98 percent of teachers in the public schools were full time). Does not include teachers in independent nursery and kindergarten schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Instructional staff and classroom teachers are not reported separately. Estimates revised spring 1968 on basis of 1965 survey of nonpublic elementary and secondary schools.

³ Preliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

⁴ The projection of pupil-teacher ratios in the regular public schools, including the effect of the Elementary and Secondary Education Act of 1965, is based on the ratio at each organizational level of enrollment to the increased number of teachers expected to be hired each year 1968 to 1977 due to the effect of the Education Act.

The projection of pupil-teacher ratios in the nonpublic schools is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1957-65 trend to 1977, with the restrictions that the elementary ratios will not go below 26 and the secondary ratios will not go below 15 pupils per teacher.

⁵ Estimated, using the 1957-64 trend.

⁶ The projection of pupil-teacher ratios in the regular public schools, excluding the effect of the Elementary and Secondary Education Act of 1965, is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1957-64 trend to 1977.

It is assumed that the projection of pupil-teacher ratios in the nonpublic elementary and secondary schools will be unaffected by the Elementary and Secondary Education Act of 1965.

For further methodological details, see appendix table C.

NOTE.—Data are 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Classroom teacher data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1967; (2) "Enrollment, Teachers, and School-housing," fall 1957 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Nonpublic School Enrollment in grades 9-12, Fall 1964, and Graduates, 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Secondary Schools, 1960-61."

TABLE 25.—Estimated demand for classroom teachers in regular public elementary and secondary day schools: United States, fall 1962 to 1977 ¹

Year (fall)	Total teacher demand	Demand for additional certificated teachers		
		For enrollment increase	For teacher turnover	Total
(1)	(2)	(3)	(4)	(5)
1962.....	1, 507, 552			
1963.....	1, 577, 777	70, 225	120, 604	190, 829
1964.....	1, 648, 184	70, 407	126, 222	196, 629
1965.....	1, 710, 319	62, 135	131, 855	193, 990
1966.....	1, 789, 238	78, 919	136, 826	215, 745
1967 ²	1, 854, 700	65, 462	143, 139	208, 601
1963-67.....		347, 148	658, 646	1, 005, 794

A. INCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ACTUAL				
1965.....	1, 710, 319	62, 135	131, 855	193, 990
1966.....	1, 789, 238	78, 919	136, 826	215, 745
1967 ²	1, 854, 700	65, 462	143, 139	208, 601
PROJECTED ³				
1968.....	1, 910, 000	55, 000	148, 000	203, 000
1969.....	1, 942, 000	32, 000	153, 000	185, 000
1970.....	1, 968, 000	26, 000	155, 000	181, 000
1971.....	1, 985, 000	17, 000	157, 000	174, 000
1972.....	1, 994, 000	9, 000	159, 000	168, 000
1968-72.....		139, 000	773, 000	912, 000
1973.....	2, 006, 000	12, 000	160, 000	172, 000
1974.....	2, 014, 000	8, 000	160, 000	168, 000
1975.....	2, 024, 000	10, 000	161, 000	171, 000
1976.....	2, 035, 000	11, 000	162, 000	173, 000
1977.....	2, 044, 000	9, 000	163, 000	172, 000
1973-77.....		50, 000	806, 000	856, 000

See footnotes at end of table.

TABLE 25.—Estimated demand for classroom teachers in regular public elementary and secondary day schools: United States, fall 1962 to 1977 ¹—Continued

Year (fall)	Total teacher demand	Demand for additional certificated teachers		
		For enrollment increase	For teacher turnover	Total
(1)	(2)	(3)	(4)	(5)
B. EXCLUDES EFFECT OF ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965				
ESTIMATED ⁴				
1965.....	1, 683, 000	35, 000	132, 000	167, 000
1966.....	1, 724, 000	41, 000	135, 000	176, 000
1967.....	1, 767, 000	43, 000	138, 000	181, 000
PROJECTED ⁵				
1968.....	1, 810, 000	43, 000	142, 000	184, 000
1969.....	1, 842, 000	32, 000	145, 000	177, 000
1970.....	1, 868, 000	26, 000	147, 000	173, 000
1971.....	1, 885, 000	17, 000	149, 000	166, 000
1972.....	1, 894, 000	9, 000	151, 000	160, 000
1968-72.....		127, 000	734, 000	861, 000
1973.....	1, 906, 000	12, 000	152, 000	164, 000
1974.....	1, 914, 000	8, 000	152, 000	160, 000
1975.....	1, 924, 000	10, 000	153, 000	163, 000
1976.....	1, 935, 000	11, 000	154, 000	165, 000
1977.....	1, 944, 000	9, 000	155, 000	164, 000
1973-77.....		50, 000	766, 000	816, 000

¹ Includes full-time and part-time classroom teachers (in 1967, 98 percent of teachers in the public schools were full time). Does not include teachers in independent nurseries and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Preliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

³ The projection of classroom teachers in public schools, including the effect of the Elementary and Secondary Education Act of 1965, assumes an additional increase in classroom teachers of 100,000 each year over the number projected under the 1957-64 trend assumptions. This increase is based on 1967 experience as well as on the amount of funds available by provisions of the Act.

⁴ Estimated, using the 1957-64 trend.

⁵ The projection, excluding the effect of the Elementary and Secondary Education Act of 1965, of demand for teachers in addition to those retained from the previous year was based on the following assumptions: (1) For enrollment increase, the

number of additional teachers needed will be the difference between the projected number that must be employed in a given year to maintain the 1957-64 trend in the pupil-teacher ratio and similarly projected number in the previous year; (2) for teacher turnover, the number of additional teachers needed to replace those leaving the profession either temporarily or permanently will be 8 percent of the total employed in the previous year. The 8 percent separation rate is based on the Office of Education study "Teacher Turnover in Public Elementary and Secondary Schools, 1959-60."

The projected demand makes no allowance for replacement of teachers who hold substandard certificates (about 5 percent of employed teachers).

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1967; (2) "Enrollment, Teachers, and Schoolhousing," 1957 through 1963.

TABLE 26.—Estimated demand for classroom teachers in regular nonpublic elementary and secondary schools: United States, fall 1962 to 1977

Year (fall)	Total teacher demand	Demand for additional certificated teachers		
		For enrollment increase	For teacher turnover	Total
(1)	(2)	(3)	(4)	(5)
1962.....	219, 000			
1963.....	228, 000	9, 000	9, 000	18, 000
1964.....	234, 000	6, 000	9, 000	15, 000
1965.....	240, 000	6, 000	9, 000	15, 000
1966.....	239, 000	-1, 000	10, 000	9, 000
1967.....	240, 000	1, 000	10, 000	11, 000
1963-67.....		21, 000	47, 000	68, 000
PROJECTED ¹				
1968.....	242, 000	2, 000	10, 000	12, 000
1969.....	241, 000		10, 000	10, 000
1970.....	244, 000	2, 000	10, 000	12, 000
1971.....	245, 000	1, 000	10, 000	11, 000
1972.....	248, 000	3, 000	10, 000	13, 000
1968-72.....		8, 000	50, 000	58, 000
1973.....	250, 000	2, 000	10, 000	12, 000
1974.....	251, 000	1, 000	10, 000	11, 000
1975.....	253, 000	2, 000	10, 000	12, 000
1976.....	254, 000	1, 000	10, 000	11, 000
1977.....	255, 000	1, 000	10, 000	11, 000
1973-77.....		7, 000	50, 000	57, 000

¹ The projection of demand for teachers not employed in the nonpublic schools in the previous year was based on the following assumptions: (1) For enrollment increase, the number of additional teachers needed will be the difference between the projected number that must be employed in a given year to maintain the 1957-65 trend in pupil-teacher ratios and the similarly projected number in the previous year; and (2) for teacher turnover, the number of additional teachers needed to replace those leaving the nonpublic schools either temporarily or permanently is assumed to be 4 percent of the

total employed in the previous year.

For further methodological details, see appendix table 3.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Nonpublic Secondary Schools, 1960-61"; (2) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (3) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66."

TABLE 27.—Estimated instructional staff in regular elementary and secondary day schools by institutional control: United States, fall 1957 to 1977¹

[In thousands]						
Year (fall)	Total	Public schools	Nonpublic schools ²	Total	Public schools	Nonpublic schools ²
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1957-----	1, 521	1, 356	165			
1958-----	1, 577	1, 408	169			
1959-----	1, 639	1, 463	176			
1960-----	1, 718	1, 526	192			
1961-----	1, 798	1, 591	207			
1962-----	1, 866	1, 647	219			
1963-----	1, 956	1, 728	228			
1964-----	2, 045	1, 811	234			
A. INCLUDES EFFECT OF ELEMEN- TARY AND SECONDARY EDUCA- TION ACT OF 1965				B. EXCLUDES EFFECT OF ELEMENTARY AND SECONDARY ED- UCATION ACT OF 1965		
ACTUAL				ESTIMATED ³		
1965-----	2, 127	1, 887	240	2, 096	1, 856	240
1966-----	2, 216	1, 977	239	2, 144	1, 905	239
1967-----	2, 295	2, 055	240	2, 198	1, 958	240
PROJECTED ⁵				PROJECTED ⁶		
1968-----	2, 364	2, 122	242	2, 253	2, 011	242
1969-----	2, 406	2, 165	241	2, 295	2, 054	241
1970-----	2, 444	2, 200	244	2, 332	2, 088	244
1971-----	2, 470	2, 225	245	2, 358	2, 113	245
1972-----	2, 489	2, 241	248	2, 377	2, 129	248
1973-----	2, 511	2, 261	250	2, 398	2, 148	250
1974-----	2, 527	2, 276	251	2, 414	2, 163	251
1975-----	2, 548	2, 295	253	2, 435	2, 182	253
1976-----	2, 568	2, 314	254	2, 454	2, 200	254
1977-----	2, 585	2, 330	255	2, 471	2, 216	255

¹ Instructional staff includes principals, supervisors, librarians, and guidance and psychological personnel, as well as full-time and part-time classroom teachers. (In 1967, 98 percent of classroom teachers were full time.) Does not include instructional staff in independent nursery and kindergarten schools, residential schools for exceptional children, subcollegiate departments of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Instructional staff and classroom teachers are not reported separately. Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Estimated, using the 1957-64 trend.

⁴ Preliminary data that include the effect of the Elementary and Secondary Education Act of 1965.

⁵ The projection of instructional staff in public schools, including the effect of the Elementary and Secondary Education Act of 1965, assumes an increase over the number expected on the basis of trend alone of approximately 100,000 each year. The projection of this increase is based on 1967 experience and

on the amount of funds made available by provisions of the Act.

⁶ The projection of instructional staff in regular public schools, excluding the effect of the Elementary and Secondary Education Act of 1965, is based on the assumption that the ratio of instructional staff to classroom teachers will follow the 1957-64 trend. The projection of instructional staff in nonpublic schools is the same as for classroom teachers (table 23).

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Instructional staff data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," biennial circulars 1957-58 through 1965-66; (2) "Statistics of Nonpublic Elementary Schools, 1961-62"; (3) "Statistics of Nonpublic Secondary Schools, 1960-61" and (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66."

TABLE 28.—Full-time and part-time instructional staff for resident degree-credit courses in all institutions of higher education, by professional rank: United States, 1st term, 1957-58 to 1977-78

Year (fall)	Total	Instructor or above			Junior instructional staff
		Total	Full time	Part time	
(1)	(2)	(3)	(4)	(5)	(6)
1957-58.....	258,848	224,930	153,150	71,780	33,918
1958-59 ¹	272,000	237,000	160,000	77,000	36,000
1959-60.....	281,506	242,914	162,292	80,622	38,592
1960-61 ¹	294,000	253,000	169,000	84,000	42,000
1961-62.....	310,772	264,749	177,052	87,697	46,023
1962-63 ¹	334,000	285,000	190,000	95,000	49,000
1963-64.....	355,542	302,896	202,396	100,500	52,646
1964-65 ¹	387,000	329,000	220,000	109,000	58,000
1965-66 ²	427,000	363,000	243,000	120,000	64,000
1966-67 ²	449,000	382,000	255,000	127,000	67,000
1967-68 ²	478,000	406,000	271,000	135,000	72,000

PROJECTED ³

1968-69.....	503,000	428,000	286,000	142,000	75,000
1969-70.....	509,000	433,000	289,000	144,000	76,000
1970-71.....	524,000	446,000	298,000	148,000	79,000
1971-72.....	545,000	463,000	309,000	154,000	82,000
1972-73.....	568,000	483,000	323,000	160,000	85,000
1973-74.....	593,000	504,000	337,000	167,000	89,000
1974-75.....	614,000	522,000	349,000	173,000	92,000
1975-76.....	633,000	538,000	360,000	179,000	95,000
1976-77.....	651,000	553,000	370,000	183,000	98,000
1977-78.....	665,000	565,000	378,000	187,000	100,000

¹ Interpolated.

² Estimated.

³ The projection of total full-time and part-time instructional staff for resident degree-credit courses was computed separately by institutional control and type categories as outlined in tables 31 to 34, footnote 4, and summed for all institutions.

The projection of total instructional staff for resident degree-credit courses employed as full-time instructor or above, part-time instructor or above, and as junior instructor, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These

percentages were 57, 28, and 15 percent, respectively, and are assumed to remain at the 1963-64 level to 1977-78.

For methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term 1957-58 to 1963-64.

TABLE 29.—Full-time equivalent instructional staff for resident degree-credit courses in all institutions of higher education, by professional rank: United States, 1st term 1957-58 to 1977-78

Year (fall)	Total full-time equivalent	Instructor or above			Full-time equivalent of junior instructional staff
		Total full-time equivalent	Full time	Full-time equivalent of part time	
(1)	(2)	(3)	(4)	(5)	(6)
1957-58	187, 042	176, 042	153, 150	22, 892	11, 000
1958-59 ¹	194, 000	182, 000	160, 000	22, 000	12, 000
1959-60	200, 850	187, 850	162, 292	25, 558	13, 000
1960-61 ¹	210, 000	196, 000	169, 000	27, 000	14, 000
1961-62	221, 553	206, 553	177, 052	29, 501	15, 000
1962-63 ¹	237, 000	221, 000	190, 000	31, 000	16, 000
1963-64	252, 013	235, 013	202, 396	32, 617	17, 000
1964-65 ¹	275, 000	256, 000	220, 000	36, 000	19, 000
1965-66 ²	303, 000	282, 000	243, 000	40, 000	21, 000
1966-67 ²	319, 000	297, 000	255, 000	42, 000	22, 000
1967-68 ²	339, 000	316, 000	271, 000	44, 000	24, 000
PROJECTED ³					
1968-69	358, 000	333, 000	286, 000	47, 000	25, 000
1969-70	362, 000	337, 000	289, 000	47, 000	25, 000
1970-71	373, 000	347, 000	298, 000	49, 000	26, 000
1971-72	387, 000	360, 000	309, 000	51, 000	27, 000
1972-73	403, 000	375, 000	323, 000	53, 000	28, 000
1973-74	421, 000	392, 000	337, 000	55, 000	29, 000
1974-75	436, 000	406, 000	349, 000	57, 000	30, 000
1975-76	450, 000	419, 000	360, 000	59, 000	31, 000
1976-77	462, 000	430, 000	370, 000	61, 000	32, 000
1977-78	472, 000	440, 000	378, 000	62, 000	32, 000

¹ Interpolated.

² Estimated.

³ The projection of full-time equivalent of part-time instructional staff is based on the following assumptions: (1) Full-time equivalent of part-time instructor or above will remain constant to 1977-78 at the 1963-64 level of 33 percent; and (2) this percentage will apply to total junior instructional staff also and will remain constant to 1977-78.

For methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term 1957-58 to 1963-64.

TABLE 30.—Total full-time and part-time professional staff in all institutions of higher education by primary function: United States, 1st term 1957-58 to 1977-78 ¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	For resident degree-credit courses ²	Other instructional staff ³	Total	Administration and services ⁴	Organized research ⁵
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58.....	381, 066	311, 164	258, 848	52, 316	69, 902	37, 760	32, 142
1958-59 ⁶	403, 000	327, 000	272, 000	55, 000	76, 000	41, 000	35, 000
1959-60.....	418, 788	337, 987	281, 506	56, 481	80, 801	43, 965	36, 836
1960-61 ⁶	439, 000	350, 000	294, 000	56, 000	88, 000	46, 000	43, 000
1961-62.....	464, 658	366, 878	310, 772	56, 106	97, 780	48, 154	49, 626
1962-63 ⁶	506, 000	395, 000	334, 000	61, 000	110, 000	53, 000	57, 000
1963-64.....	544, 719	421, 849	355, 542	66, 307	122, 870	58, 367	64, 503
1964-65 ⁶	594, 000	460, 000	387, 000	73, 000	134, 000	63, 000	71, 000
1965-66 ⁷	657, 000	510, 000	427, 000	83, 000	147, 000	70, 000	78, 000
1966-67 ⁷	691, 000	537, 000	449, 000	88, 000	154, 000	73, 000	81, 000
1967-68 ⁷	735, 000	572, 000	478, 000	95, 000	163, 000	77, 000	86, 000
PROJECTED ⁸							
1968-69.....	775, 000	604, 000	503, 000	101, 000	171, 000	81, 000	90, 000
1969-70.....	785, 000	612, 000	509, 000	103, 000	173, 000	82, 000	91, 000
1970-71.....	809, 000	631, 000	524, 000	107, 000	178, 000	84, 000	93, 000
1971-72.....	840, 000	656, 000	545, 000	111, 000	184, 000	87, 000	97, 000
1972-73.....	876, 000	685, 000	568, 000	117, 000	192, 000	91, 000	101, 000
1973-74.....	915, 000	716, 000	593, 000	123, 000	200, 000	95, 000	105, 000
1974-75.....	948, 000	742, 000	614, 000	128, 000	206, 000	98, 000	108, 000
1975-76.....	978, 000	766, 000	633, 000	133, 000	212, 000	101, 000	111, 000
1976-77.....	1, 005, 000	788, 000	651, 000	137, 000	218, 000	104, 000	114, 000
1977-78.....	1, 028, 000	805, 000	665, 000	141, 000	222, 000	106, 000	116, 000

¹ Excludes professional staff for instruction at the elementary and secondary school level.

² Includes faculty with rank of instructor or above and junior instructional staff.

³ Includes instructional staff for extension, resident non-degree-credit courses, and instruction by mail, radio, or TV, short courses, and individual lessons.

⁴ Includes professional staff for general administration, student personnel services, and libraries.

⁵ Includes only professional staff engaged specifically for full-time or part-time research and those who have been relieved from some or all other duties in order to perform systematic organized research. Excludes graduate students not performing research at a professional level and research consultants employed occasionally.

⁶ Interpolated.

⁷ Estimated.

⁸ The projection of total full-time and part-time instructional staff for resident degree-credit courses, instructional staff for other than degree-credit courses, professional staff for administration and services, and professional staff for organized research was computed separately by institutional control and type categories as outlined in tables 31 through 34, footnote 4, and summed for all institutions.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term, 1957-58 to 1963-64.

TABLE 31.—Total full-time and part-time professional staff in 4-year public institutions of higher education, by primary function: United States, 1st term 1957-58 to 1977-78¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	For resident degree-credit courses	Other instructional staff	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58.....	183,339	150,890	116,728	34,162	32,449	13,171	19,278
1958-59 ²	193,146	157,895	122,400	35,495	35,251	14,443	20,808
1959-60.....	199,543	162,074	126,136	35,938	37,469	15,369	22,100
1960-61 ²	209,299	168,550	132,300	36,250	40,749	16,273	24,476
1961-62.....	222,282	177,354	140,541	36,813	44,928	17,510	27,418
1962-63 ²	247,187	195,115	154,976	40,139	52,072	19,837	32,235
1963-64.....	272,746	212,797	169,497	43,300	59,949	22,563	37,386
1964-65 ²	299,000	234,000	185,000	48,000	65,000	24,000	41,000
1965-66 ³	334,000	262,000	208,000	54,000	73,000	27,000	46,000
1966-67 ³	349,000	273,000	217,000	56,000	76,000	28,000	48,000
1967-68 ³	376,000	294,000	233,000	61,000	82,000	30,000	51,000

PROJECTED⁴

1968-69.....	398,000	311,000	247,000	64,000	86,000	32,000	54,000
1969-70.....	407,000	318,000	253,000	66,000	88,000	33,000	56,000
1970-71.....	420,000	329,000	261,000	68,000	91,000	34,000	57,000
1971-72.....	438,000	343,000	272,000	71,000	95,000	35,000	60,000
1972-73.....	457,000	358,000	284,000	74,000	99,000	37,000	63,000
1973-74.....	480,000	376,000	298,000	78,000	104,000	39,000	66,000
1974-75.....	498,000	390,000	309,000	80,000	108,000	40,000	68,000
1975-76.....	515,000	403,000	320,000	83,000	112,000	42,000	70,000
1976-77.....	530,000	415,000	329,000	86,000	115,000	43,000	72,000
1977-78.....	542,000	424,000	337,000	88,000	118,000	44,000	74,000

¹ For exclusions and inclusions under the different categories of professional staff, see table 30, footnotes 1 through 5.

² Interpolated.

³ Estimated.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 4-year public institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1957-58 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-credit courses, professional staff for administration and services, and professional staff for

organized research, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 4-year public institutions were 26, 13, and 22 percent, respectively, and are assumed to remain at the 1963-64 level to 1977-78.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term 1957-58 to 1963-64.

TABLE 32.—Total full-time and part-time professional staff in 4-year private institutions of higher education, by primary function: United States, 1st term 1957-58 to 1977-78 ¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	For resident degree-credit courses	Other instructional staff	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58.....	162,361	129,834	121,216	8,618	32,527	19,708	12,819
1958-59 ²	171,961	136,625	127,568	9,057	35,336	21,559	13,777
1959-60.....	179,515	141,691	132,354	9,337	37,824	23,139	14,685
1960-61 ²	187,833	145,909	137,004	8,905	41,924	23,839	18,085
1961-62.....	198,635	151,763	143,347	8,416	46,872	24,791	22,081
1962-63 ²	209,913	158,554	149,298	9,256	51,359	26,874	24,485
1963-64.....	219,759	164,012	153,991	10,021	55,747	28,749	26,998
1964-65 ²	236,000	175,000	165,000	11,000	61,000	31,000	30,000
1965-66 ³	253,000	188,000	176,000	11,000	65,000	33,000	32,000
1966-67 ³	265,000	197,000	185,000	12,000	68,000	35,000	33,000
1967-68 ³	272,000	202,000	190,000	12,000	70,000	36,000	34,000

PROJECTED ⁴

1968-69.....	283,000	210,000	197,000	13,000	73,000	37,000	36,000
1969-70.....	280,000	208,000	195,000	13,000	72,000	37,000	35,000
1970-71.....	285,000	211,000	199,000	13,000	73,000	38,000	36,000
1971-72.....	293,000	217,000	204,000	13,000	75,000	39,000	37,000
1972-73.....	302,000	224,000	210,000	14,000	78,000	40,000	38,000
1973-74.....	310,000	230,000	216,000	14,000	80,000	41,000	39,000
1974-75.....	318,000	236,000	221,000	14,000	82,000	42,000	40,000
1975-76.....	325,000	241,000	226,000	15,000	84,000	43,000	41,000
1976-77.....	330,000	245,000	230,000	15,000	85,000	44,000	41,000
1977-78.....	335,000	248,000	233,000	15,000	86,000	44,000	42,000

¹ For exclusions and inclusions under the different categories of professional staff, see table 30, footnotes 1 through 5.

² Interpolated.

³ Estimated.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 4-year private institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1957-58 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-credit courses, professional staff for administration and services, and professional staff for

organized research, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 4-year private institutions were 7, 19, and 18 percent, respectively, and are assumed to remain at the 1963-64 level to 1977-78.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term 1957-58 to 1963-64.

TABLE 33.—Total full-time and part-time professional staff in 2-year public institutions of higher education, by primary function: United States, 1st term 1957-58 to 1977-78 ¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	For resident degree-credit courses	Other instructional staff	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58.....	25,489	22,921	15,244	7,677	2,568	2,557	11
1958-59 ²	28,007	25,229	16,864	8,365	2,778	2,766	12
1959-60.....	30,408	27,440	18,405	9,035	2,968	2,961	7
1960-61 ²	32,116	28,949	19,992	8,957	3,167	3,159	8
1961-62.....	34,382	30,966	22,062	8,904	3,416	3,406	10
1962-63 ²	38,036	34,257	24,382	9,875	3,779	3,755	24
1963-64.....	41,462	37,365	26,545	10,820	4,097	4,055	42
1964-65 ²	47,000	42,000	30,000	12,000	5,000	4,000	L
1965-66 ²	56,000	50,000	36,000	14,000	5,000	5,000	L
1966-67 ²	64,000	57,000	41,000	16,000	6,000	6,000	L
1967-68 ²	74,000	66,000	47,000	19,000	7,000	7,000	L

PROJECTED ⁴

1968-69.....	80,000	72,000	52,000	21,000	8,000	8,000	L
1969-70.....	84,000	76,000	54,000	22,000	8,000	8,000	L
1970-71.....	89,000	80,000	57,000	23,000	9,000	9,000	L
1971-72.....	95,000	86,000	61,000	25,000	9,000	9,000	L
1972-73.....	102,000	92,000	66,000	26,000	10,000	10,000	L
1973-74.....	109,000	98,000	70,000	28,000	11,000	11,000	L
1974-75.....	116,000	104,000	75,000	30,000	11,000	11,000	L
1975-76.....	122,000	110,000	78,000	31,000	12,000	12,000	L
1976-77.....	128,000	116,000	83,000	33,000	13,000	12,000	L
1977-78.....	134,000	121,000	86,000	34,000	13,000	13,000	L

L=less than 500.

¹ For exclusions and inclusions under the different categories of professional staff, see table 30, footnotes 1 through 5.

² Interpolated.

³ Estimated.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 2-year public institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1957-58 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-credit courses, professional staff for administration and services, and professional staff for organized research, is based on the percentage each was of

total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 2-year public institutions were 40, 15, and less than one percent, respectively, and are assumed to remain at the 1963-64 level to 1977-78.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term 1957-58 to 1963-64.

TABLE 34.—Total full-time and part-time professional staff in 2-year private institutions of higher education, by primary function: United States, 1st term 1957-58 to 1977-78¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	For resident degree-credit courses	Other instructional staff	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58_____	9, 877	7, 519	5, 660	1, 859	2, 358	2, 324	34
1958-59 ² _____	9, 736	7, 235	5, 168	2, 067	2, 501	2, 460	41
1959-60_____	9, 322	6, 782	4, 611	2, 171	2, 540	2, 496	44
1960-61 ² _____	9, 324	6, 779	4, 704	2, 075	2, 545	2, 465	80
1961-62_____	9, 359	6, 795	4, 822	1, 973	2, 564	2, 447	117
1962-63 ² _____	10, 405	7, 492	5, 344	2, 148	2, 913	2, 811	102
1963-64_____	10, 752	7, 675	5, 509	2, 166	3, 077	3, 000	77
1964-65 ² _____	13, 000	9, 000	7, 000	3, 000	4, 000	4, 000	L
1965-66 ³ _____	14, 000	10, 000	7, 000	3, 000	4, 000	4, 000	L
1966-67 ³ _____	14, 000	10, 000	7, 000	3, 000	4, 000	4, 000	L
1967-68 ³ _____	14, 000	10, 000	7, 000	3, 000	4, 000	4, 000	L

PROJECTED ⁴

1968-69_____	14, 000	10, 000	7, 000	3, 000	4, 000	4, 000	L
1969-70_____	14, 000	10, 000	7, 000	3, 000	4, 000	4, 000	L
1970-71_____	15, 000	10, 000	7, 000	3, 000	4, 000	4, 000	L
1971-72_____	15, 000	11, 000	8, 000	3, 000	4, 000	4, 000	L
1972-73_____	15, 000	11, 000	8, 000	3, 000	4, 000	4, 000	L
1973-74_____	16, 000	11, 000	8, 000	3, 000	5, 000	4, 000	L
1974-75_____	16, 000	12, 000	8, 000	3, 000	5, 000	5, 000	L
1975-76_____	17, 000	12, 000	9, 000	3, 000	5, 000	5, 000	L
1976-77_____	17, 000	12, 000	9, 000	3, 000	5, 000	5, 000	L
1977-78_____	17, 000	12, 000	9, 000	3, 000	5, 000	5, 000	L

L=less than 500.

¹ For exclusions and inclusions under the different categories of professional staff, see table 30, footnotes 1 through 5.

² Interpolated.

³ Estimated.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 2-year private institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1957-58 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-credit courses, professional staff for administration and services, and professional staff for

organized research, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 2-year private institutions were 39, 55, and 1 percent, respectively, and are assumed to remain at the 1963-64 level to 1977-78.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term 1957-58 to 1963-64.

TABLE 35.—Estimated full-time equivalent professional staff in all institutions of higher education, by primary function: United States, 1st term 1957-58 to 1977-78¹

Year (fall)	Total full-time equivalent professional staff	Full-time equivalent instructional staff			Full-time equivalent other professional staff		
		Total	For resident degree-credit courses	Other instructional staff	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58.....	274, 000	224, 000	187, 000	37, 000	50, 000	27, 000	23, 000
1958-59.....	287, 000	233, 000	² 194, 000	39, 000	54, 000	29, 000	25, 000
1959-60.....	298, 000	241, 000	201, 000	40, 000	57, 000	31, 000	26, 000
1960-61.....	313, 000	250, 000	² 210, 000	40, 000	63, 000	32, 000	31, 000
1961-62.....	332, 000	261, 000	222, 000	40, 000	70, 000	34, 000	36, 000
1962-63.....	359, 000	281, 000	² 237, 000	44, 000	79, 000	38, 000	41, 000
1963-64.....	387, 000	299, 000	252, 000	47, 000	87, 000	41, 000	46, 000
1964-65.....	422, 000	327, 000	² 275, 000	52, 000	95, 000	45, 000	50, 000
1965-66.....	467, 000	362, 000	³ 303, 000	59, 000	105, 000	50, 000	55, 000
1966-67.....	491, 000	382, 000	³ 319, 000	62, 000	110, 000	52, 000	58, 000
1967-68.....	522, 000	407, 000	³ 339, 000	67, 000	116, 000	55, 000	61, 000
PROJECTED ¹							
1968-69.....	551, 000	429, 000	358, 000	71, 000	122, 000	58, 000	64, 000
1969-70.....	558, 000	435, 000	362, 000	73, 000	123, 000	58, 000	65, 000
1970-71.....	574, 000	448, 000	373, 000	76, 000	126, 000	60, 000	66, 000
1971-72.....	597, 000	466, 000	387, 000	79, 000	131, 000	62, 000	69, 000
1972-73.....	623, 000	486, 000	403, 000	83, 000	136, 000	65, 000	71, 000
1973-74.....	650, 000	508, 000	421, 000	87, 000	142, 000	67, 000	74, 000
1974-75.....	673, 000	527, 000	436, 000	91, 000	146, 000	70, 000	77, 000
1975-76.....	695, 000	544, 000	450, 000	94, 000	151, 000	72, 000	79, 000
1976-77.....	714, 000	559, 000	462, 000	97, 000	155, 000	74, 000	81, 000
1977-78.....	730, 000	572, 000	472, 000	100, 000	158, 000	75, 000	83, 000

¹ For the categories of professional staff members included in this table, see footnotes 1 through 5, table 30.

The estimation, 1957-58 to 1967-68 and the projection, 1968-69 to 1977-78 of the full-time equivalent of reported and projected total full-time and part-time professional staff for instructional courses other than degree-credit, for administration and services, and for organized research, is based on the assumption that the percent that full-time equivalent instructional staff for resident degree-credit courses is of total full-time and part-time instructional staff for these courses (71 percent in 1963-64) will apply to all other professional staff as well. The totals of full-time and part-time staff shown in table 30 were multiplied

by this percent.

² Interpolated.

³ Estimated.

For further methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term 1957-58 to 1963-64.

TABLE 36.—Estimated demand for full-time equivalent instructional staff in institutions of higher education, by primary function: United States, 1st term 1962-63 to 1977-78 ¹

Year (fall)	Total full-time equivalent instructional staff ²			Additional full-time equivalent instructional staff needed		
	Total	For resident degree-credit courses	Other instructional staff	Total	For increased enrollment	For replacement
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1962-63 ³	281, 000	237, 000	44, 000			
1963-64	299, 000	252, 000	47, 000	35, 000	18, 000	17, 000
1964-65 ³	327, 000	275, 000	52, 000	46, 000	28, 000	18, 000
1965-66 ⁴	362, 000	303, 000	59, 000	55, 000	35, 000	20, 000
1966-67 ⁴	382, 000	319, 000	62, 000	41, 000	19, 000	22, 000
1967-68 ⁴	407, 000	339, 000	67, 000	48, 000	25, 000	23, 000
1963-68	1, 776, 000	1, 489, 000	287, 000	225, 000	126, 000	99, 000
PROJECTED ⁵						
1968-69	429, 000	358, 000	71, 000	47, 000	22, 000	24, 000
1969-70	435, 000	362, 000	73, 000	32, 000	6, 000	26, 000
1970-71	448, 000	373, 000	76, 000	40, 000	13, 000	26, 000
1971-72	466, 000	387, 000	79, 000	45, 000	18, 000	27, 000
1972-73	486, 000	403, 000	83, 000	48, 000	20, 000	28, 000
1968-73	2, 265, 000	1, 882, 000	382, 000	211, 000	80, 000	131, 000
1973-74	508, 000	421, 000	87, 000	51, 000	22, 000	29, 000
1974-75	527, 000	436, 000	91, 000	49, 000	18, 000	31, 000
1975-76	544, 000	450, 000	94, 000	49, 000	17, 000	32, 000
1976-77	559, 000	462, 000	97, 000	48, 000	16, 000	33, 000
1977-78	572, 000	472, 000	100, 000	46, 000	13, 000	34, 000
1973-78	2, 711, 000	2, 242, 000	469, 000	243, 000	86, 000	158, 000

¹ For the categories of professional staff members included in this table, see footnotes 1 through 5, table 30.

² For method of estimating and projecting full-time equivalent instructional staff, see table 28, footnote 3 and table 35, footnote 1.

³ Interpolated.

⁴ Estimated.

⁵ The projection of additional full-time equivalent instructional staff for increased enrollment was computed as the difference between the total full-time equivalent instructional staff employed in 2 successive years.

The projection of additional full-time equivalent instructional

staff for replacement of those leaving the profession, temporarily or permanently, was estimated at 6 percent of the total full-time equivalent professional staff employed in the previous year.

For methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term, 1957-58 to 1963-64.

TABLE 37.—Estimated demand for full-time equivalent professional staff in institutions of higher education, by primary function: United States, 1st term 1962-63 to 1977-78¹

Year (fall)	Full-time equivalent professional staff ²					Additional full-time equivalent professional staff needed		
	Total	Instructional staff		Administration and services	Organized research	Total	For increased enrollment	For replacement
		For resident degree-credit courses	Other instructional staff					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1962-63 ³ ----	359, 000	237, 000	44, 000	38, 000	41, 000	-----	-----	-----
1963-64-----	387, 000	252, 000	47, 000	41, 000	46, 000	49, 000	27, 000	22, 000
1964-65 ³ ----	423, 000	275, 000	52, 000	45, 000	51, 000	60, 000	36, 000	23, 000
1965-66 ⁴ ----	468, 000	303, 000	59, 000	50, 000	56, 000	70, 000	45, 000	25, 000
1966-67 ⁴ ----	495, 000	319, 000	62, 000	52, 000	61, 000	55, 000	27, 000	28, 000
1967-68 ⁴ ----	527, 000	339, 000	67, 000	55, 000	66, 000	63, 000	33, 000	30, 000
1968-68-----	2, 299, 000	1, 489, 000	287, 000	243, 000	280, 000	296, 000	168, 000	128, 000
PROJECTED ⁵								
1968-69-----	558, 000	358, 000	71, 000	58, 000	71, 000	62, 000	30, 000	32, 000
1969-70-----	569, 000	362, 000	73, 000	58, 000	76, 000	45, 000	11, 000	33, 000
1970-71-----	589, 000	373, 000	76, 000	60, 000	81, 000	54, 000	20, 000	34, 000
1971-72-----	614, 000	387, 000	79, 000	62, 000	86, 000	60, 000	25, 000	35, 000
1972-73-----	642, 000	403, 000	83, 000	65, 000	91, 000	65, 000	28, 000	37, 000
1968-73-----	2, 972, 000	1, 882, 000	382, 000	303, 000	405, 000	286, 000	115, 000	171, 000
1973-74-----	672, 000	421, 000	87, 000	67, 000	96, 000	68, 000	30, 000	39, 000
1974-75-----	697, 000	436, 000	91, 000	70, 000	101, 000	66, 000	26, 000	40, 000
1975-76-----	722, 000	450, 000	94, 000	72, 000	106, 000	66, 000	24, 000	42, 000
1976-77-----	744, 000	462, 000	97, 000	74, 000	111, 000	66, 000	22, 000	43, 000
1977-78-----	763, 000	472, 000	100, 000	75, 000	116, 000	64, 000	19, 000	45, 000
1973-78-----	3, 598, 000	2, 242, 000	469, 000	357, 000	530, 000	330, 000	121, 000	209, 000

¹ For the categories of professional staff members included in this table, see footnotes 1 through 5, table 30.

² For the method of estimating and projecting full-time equivalent staff see table 28, footnote 3 and table 35, footnote 1.

³ Interpolated.

⁴ Estimated.

⁵ The projection of additional full-time equivalent professional staff for increased enrollment was computed as the difference between the total full-time equivalent professional staff employed in 2 successive years.

The projection of additional full-time equivalent professional staff for replacement of those leaving the profession, tempo-

rarily or permanently, was estimated at 6 percent of the total full-time equivalent professional staff employed in the previous year.

For methodological details, see appendix table C.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, 1st term, 1957-58 to 1963-64.

Chapter IV.—Expenditures of Educational Institutions

Forrest W. Harrison and C. George Lind

Explanations and definitions

The main tables in this chapter include only expenditures of regular public and nonpublic elementary and secondary schools and institutions of higher education in the 50 States and the District of Columbia. This means that "other" and "special" institutions are not included.

"Other" institutions include elementary and secondary residential schools for exceptional children (public and nonpublic), Federal schools for Indians (public), and federally operated elementary and secondary schools on military posts (public). In 1967-68, it is estimated that expenditures of "other" schools were about \$200 million for public and \$100 million for nonpublic schools in this category. Almost all "other" schools, including the nonpublic, are nonprofit-making institutions.

"Special" institutions include schools such as trade schools or business colleges not in the regular school or college framework. Expenditure data are not available for "special" schools, but it would seem that they may spend approximately \$700 million per year. This supposition is based on the fact that the U.S. Bureau of the Census estimated that 1.3 million persons, aged 5 to 34 years, were enrolled in "special" schools in October 1965.¹ If an average expenditure per student of about \$550 is assumed, the total expenditures for these schools would be about \$700 million. Almost all "special" schools are nonpublic profit-making institutions.

Regular institutions include public and most nonprofit-making nonpublic elementary and secondary schools (kindergarten through grade 12) plus the institutions of higher education offering degree-credit courses and a small number of technical and professional schools. Most of these schools and colleges are oriented toward regular academic programs, but some of them are primarily technical training institutions or offer both academic and vocational courses. As noted previously, the main tables and discussions here are for these regular institutions. However, "other" schools are included in the discussion and table on pages 66-70.

Total expenditures include all funds expended for capital outlay, current expenditures, and interest. They exclude repayment of debt and transfers of funds that would result in duplication.

Capital outlay includes expenditures which result in additions to plant assets. This includes the expenditures by public school building authorities but excludes lease or rental payments made to these agencies. Borrowed money is included; a large percentage of the funds expended for capital outlay was received from loans. In 1965-66, it was estimated that 83 percent of the capital outlay for public elementary and secondary schools was for land and buildings and the remaining 17 percent for new school buses and other equipment. The percentage for equipment could be higher than 17 percent in 1967-68 because a substantial amount of the funds available from the Elementary and Secondary Education Act of 1965 was spent for equipment. About 81 percent of the capital outlay by institutions of higher education was for land and buildings, and the remaining 19 percent was for equipment.

Current expenditures include any expenditures except those for repayment of debt and capital outlay. Interest is generally excluded from the current expenditures shown here because it is treated separately. The largest current expense item is salaries of instructional staff. About 62 percent of current expenditures by public elementary and secondary schools is for this purpose. The remaining 38 percent goes for transportation, maintenance, etc.

Interest includes all funds expended for the use of money. Most of the interest shown here was expended on account of long-term debt that was incurred for constructing buildings.

Expenditures by regular and "other" schools by source of funds

Although no attempt was made to project the source of funds to be expended by educational institutions, estimates are shown of how they identified sources of funds they expended during

¹ U.S. Department of Commerce, Bureau of the Census, "Current Population Reports, School Enrollment: October 1965," Series P-20, No. 167, Aug. 30, 1967.

the past 11 years. In order to do this, estimates for "other" schools were added to the total expenditures shown in table 38 for the appropriate years. The resulting total expenditures for regular and "other" schools were then broken down by source of funds by first adjusting receipts to equate them with expenditures, and then assuming a continuation of the 1957-58 through 1963-64 trend in the amount of receipts from each source. In the case of elementary and secondary schools, the trend was modified by adding \$1 billion to the trend figure for 1965-66, 1966-67, 1967-68, 1968-69, and 1969-70, because of the Elementary and Secondary Education Act of 1965. Equating receipts to expenditures was accomplished mainly by including loans and excluding the receipts used for repayment of loans.

Estimated expenditures by regular and "other" educational institutions, by source of funds: 1957-58 to 1968-69¹

[In billions of current dollars and as percentages]

Source of funds, by control and level	1957-58	1959-60	1961-62	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
AMOUNT									
All levels:									
Total, public and nonpublic.....	\$21.1	\$24.7	\$29.8	\$36.2	\$40.4	\$45.5	\$49.1	\$54.6	\$58.5
Federal.....	1.4	1.8	2.4	3.2	3.8	5.4	6.2	7.1	7.8
State.....	6.2	7.3	8.9	10.7	11.9	13.4	14.7	16.3	17.5
Local.....	8.5	9.5	11.1	12.8	14.2	15.1	15.7	17.6	18.6
All other.....	5.0	6.1	7.4	9.5	10.5	11.6	12.5	13.6	14.6
Total, public.....	17.0	19.7	23.4	28.1	31.4	35.5	38.4	42.9	45.9
Federal.....	1.1	1.3	1.6	2.1	2.4	3.7	4.2	4.8	5.2
State.....	6.2	7.3	8.8	10.6	11.8	13.3	14.6	16.2	17.3
Local.....	8.5	9.5	11.1	12.8	14.2	15.0	15.7	17.5	18.6
All other.....	1.2	1.6	1.9	2.6	3.0	3.5	3.9	4.4	4.8
Total, nonpublic....	4.1	5.0	6.4	8.1	9.0	10.0	10.7	11.7	12.6
Federal.....	.3	.5	.8	1.1	1.4	1.7	2.0	2.3	2.6
State.....	(2)	(2)	.1	.1	.1	.1	.1	.1	.1
Local.....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
All other.....	3.8	4.5	5.5	6.9	7.5	8.2	8.6	9.3	9.9

See footnotes at end of table.

Estimated expenditures by regular and "other" educational institutions, by source of funds: 1957-58 to 1968-69¹—Continued

Source of funds, by control and level (1)	1957-58 (2)	1959-60 (3)	1961-62 (4)	1963-64 (5)	1964-65 (6)	1965-66 (7)	1966-67 (8)	1967-68 (9)	1968-69 (10)
AMOUNT									
Elementary and secondary schools:									
Total, public and nonpublic.....	15.8	18.0	21.3	24.9	27.3	30.5	32.2	35.8	38.1
Federal.....	.7	.8	.9	1.0	1.0	2.1	2.3	2.6	2.7
State.....	4.8	5.7	6.8	8.1	8.8	9.9	10.8	12.0	12.9
Local.....	8.4	9.3	10.9	12.5	13.9	14.7	15.3	17.1	18.1
All other.....	1.9	2.2	2.7	3.3	3.6	3.8	3.8	4.1	4.4
Total, public.....	13.9	15.9	18.7	21.7	23.8	26.7	28.5	31.7	33.7
Federal.....	.7	.8	.9	1.0	1.0	2.1	2.3	2.6	2.7
State.....	4.8	5.7	6.8	8.1	8.8	9.9	10.8	12.0	12.8
Local.....	8.4	9.3	10.9	12.5	13.9	14.6	15.3	17.0	18.1
All other.....	(²)	.1	.1	.1	.1	.1	.1	.1	.1
Total, nonpublic.....	1.9	2.1	2.6	3.2	3.5	3.8	3.7	4.1	4.4
Federal.....									
State.....									
Local.....									
All other.....	1.9	2.1	2.6	3.2	3.5	3.8	3.7	4.1	4.4
Institutions of higher education:									
Total, public and nonpublic.....	5.3	6.7	8.5	11.3	13.1	15.0	16.9	18.8	20.4
Federal.....	.7	1.0	1.5	2.2	2.8	3.3	3.9	4.5	5.1
State.....	1.4	1.6	2.1	2.6	3.1	3.5	3.9	4.3	4.6
Local.....	.1	.2	.2	.3	.3	.4	.4	.5	.5
All other.....	3.1	3.9	4.7	6.2	6.9	7.8	8.7	9.5	10.2
Total, public.....	3.1	3.8	4.7	6.4	7.6	8.8	9.9	11.2	12.2
Federal.....	.4	.5	.7	1.1	1.4	1.6	1.9	2.2	2.5
State.....	1.4	1.6	2.0	2.5	3.0	3.4	3.8	4.2	4.5
Local.....	.1	.2	.2	.3	.3	.4	.4	.5	.5
All other.....	1.2	1.5	1.8	2.5	2.9	3.4	3.8	4.3	4.7
Total, nonpublic.....	2.2	2.9	3.8	4.9	5.5	6.2	7.0	7.6	8.2
Federal.....	.3	.5	.8	1.1	1.4	1.7	2.0	2.3	2.6
State.....	(²)	(²)	.1	.1	.1	.1	.1	.1	.1
Local.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
All other.....	1.9	2.4	2.9	3.7	4.0	4.4	4.9	5.2	5.5

See footnotes at end of table.

Estimated expenditures by regular and "other" educational institutions, by source of funds: 1957-58 to 1968-69 —Continued

Source of funds, by control and level	1957-68	1959-60	1961-62	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
PERCENT									
All levels:									
Total, public and nonpublic.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	6.6	7.3	8.1	8.8	9.4	11.9	12.6	13.0	13.3
State.....	29.4	29.5	29.9	29.6	29.5	29.4	29.9	29.9	29.9
Local.....	40.2	38.5	37.2	35.4	35.1	33.2	32.0	32.2	31.8
All other.....	23.8	24.7	24.8	26.2	26.0	25.5	25.5	24.9	25.0
Total, public.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	6.5	6.6	6.9	7.5	7.6	10.4	10.9	11.2	11.3
State.....	36.5	37.1	37.6	37.7	37.6	37.5	38.0	37.8	37.7
Local.....	50.0	48.2	47.4	45.6	45.2	42.3	40.9	40.8	40.5
All other.....	7.0	8.1	8.1	9.2	9.6	9.8	10.2	10.2	10.5
Total, nonpublic.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	7.3	10.0	12.5	13.6	15.6	17.0	18.7	19.6	20.6
State.....	(3)	(3)	1.6	1.2	1.1	1.0	.9	.9	.8
Local.....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
All other.....	92.7	90.0	85.9	85.2	83.3	82.0	80.4	79.5	78.6
Elementary and second- ary schools:									
Total, public and nonpublic.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	4.1	4.2	4.2	4.0	3.7	6.9	7.2	7.2	7.2
State.....	30.4	31.4	31.9	32.5	32.2	32.5	33.5	33.5	33.5
Local.....	53.5	52.2	51.2	50.2	50.9	48.2	47.5	47.5	47.5
All other.....	12.0	12.2	12.7	13.3	13.2	12.4	11.8	11.8	11.8
Total, public.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	4.3	4.9	4.8	4.6	4.3	8.0	8.1	8.1	8.1
State.....	34.8	35.6	36.2	37.3	37.0	36.9	37.8	37.8	37.8
Local.....	60.6	59.2	58.7	57.8	58.4	54.8	53.8	53.8	53.8
All other.....	.3	.3	.3	.3	.3	.3	.3	.3	.3
Total, nonpublic.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....									
State.....									
Local.....									
All other.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

See footnotes at end of table.

Estimated expenditures by regular and "other" educational institutions, by source of funds: 1957-58 to 1968-69¹—Continued

Source of funds, by control and level	1957-58	1959-60	1961-62	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
PERCENT									
Institutions of higher education:									
Total, public and nonpublic.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	13.6	16.0	18.1	19.5	21.4	21.7	23.1	24.0	25.0
State.....	26.7	24.8	24.6	23.9	23.6	23.7	23.0	22.9	22.5
Local.....	3.1	2.8	2.6	2.6	2.3	2.6	2.4	2.6	2.5
All other.....	56.6	56.4	54.7	54.0	52.7	52.0	51.5	50.5	50.0
Total, public.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	13.1	15.0	16.0	17.1	17.7	18.4	19.0	19.7	20.4
State.....	44.1	41.9	42.1	40.2	39.6	39.0	38.5	37.9	37.3
Local.....	5.1	4.7	4.3	4.4	4.3	4.2	4.1	4.0	3.8
All other.....	37.7	38.4	37.6	38.3	38.4	38.4	38.4	38.4	38.5
Total, nonpublic.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal.....	14.4	17.4	20.9	23.6	25.2	26.8	28.3	29.6	31.5
State.....	1.2	1.5	1.5	1.2	1.3	1.3	1.4	1.4	1.4
Local.....	.2	.2	.2	.2	.2	.2	.2	.2	.2
All other.....	84.2	80.9	77.4	75.0	73.3	71.7	70.1	68.5	66.9

¹ In addition to regular schools (shown in table 39) these figures include "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools on posts. The annual expenditures of "other" elementary and secondary schools were estimated as follows:

Years	Public	Nonpublic
	Millions	
1957-58 and 1959-60.....	\$100	Less than \$50 million.
1961-62.....	200	Less than \$50 million.
1963-64 to 1968-69.....	200	\$100 million.

² Less than \$50 million.

³ Less than 0.05 percent.

NOTE.—Because of rounding, detail may not add to totals.

Data for the table above were based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," 1957-58, 1959-60, 1961-62, 1963-64, and 1965-66; (2) "Statistics of Public Schools," fall 1964, 1965, 1966, and 1967; (3) "Financial Statistics of Higher Education," 1957-58, 1959-60, 1961-62, and 1963-64; (4) "Digest of Educational Statistics," 1967; and unpublished data in the U.S. Office of Education.

Total expenditures were defined as the expenditure of all money from both loans and grants and exclude only the funds used for reducing debt and transfers that result in duplication. Expenditures from Federal, State, and local sources are defined as institutional expenditures of all grants (but not loans) of funds received from those sources. Expenditures from all other sources include all funds received by the institutions that were not received as a grant from Federal, State, and local governments. Loans to institutions of higher education from any source are included under "all other." (It is estimated that in 1967-68 \$400 million in Federal loans to institutions of higher education was included in the "all other" category shown here.)

Since the foregoing definitions are designed to show sources of funds through the eyes of educational institutions, the Federal figures shown in the preceding table are different from the

ones shown in the Appendix expenditure table on Federal funds for education. The three main reasons are as follows:

(1) Different items are included. For example, the table on Federal funds shows grants and loans to individuals, which would appear in institutional accounts as a receipt from tuition or auxiliary services; or it may be spent for board and room outside the institution and not be a receipt of the institution from any source.

(2) The same items may be handled differently. For example, the table on Federal funds shows only basic research for institutions of higher education, while the institutions include some applied research grants from the Federal Government.

(3) The table on Federal funds generally shows obligated funds, while the institutional figures show expenditures.

Total expenditures by regular institutions (table 38)

Total annual expenditures of regular educational institutions (in 1967-68 dollars) increased from \$26.1 billion in 1957-58 to \$54.3 billion in 1967-68, and are expected to be \$76.3 billion in 1977-78. The expenditure increases are due chiefly to increases in enrollment at all levels of education, especially in high schools and colleges, and the increasing costs of the many items, such as school facilities and salaries of teachers, that are necessary for providing education. The projected total expenditures are shown in table 38. They are based mainly on the assumptions that the 1957-58 to 1967-68 trend will continue through 1977-78, and that some additional amounts (above trend) will be expended because of the effects of the Elementary and Secondary Education Act of 1965.

Regular public elementary and secondary schools (tables 38, 40)

Annual current expenditures for public elementary and secondary schools (in 1967-68 dollars) increased from \$12.4 billion in 1957-58 to \$26.3 billion in 1967-68, an increase of 112 percent. They are expected to increase 33 percent to \$35 billion by 1977-78. These projections include the increased expenditures expected because of the Elementary and Secondary Education Act of 1965.

Increased enrollment together with increased costs per pupil have accounted for the increase in current expenditures. Expenditures have been increasing and are expected to continue to increase for practically all of the major items included in current expense, such as administration, instruction, operation and maintenance of plant, fixed charges, and other school services and programs. Annual current expenditures per pupil (in 1967-68 dollars) increased from \$406 in 1957-58 to \$623 in 1967-68, and are expected to increase to \$793 by 1977-78. The last two figures include the effects of the Elementary and Secondary Education Act of 1965.

Projected current expenditures for public elementary and secondary day schools are shown in table 40. They were projected as follows:

(1) Current expenditures per pupil in average daily attendance (ADA) for the base years, 1957-58 to 1967-68 were converted to 1967-68 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Monthly index numbers were averaged on a July-June basis to correspond to the school years.

(2) The current expenditures per pupil for the years 1957-58 to 1964-65 were used in deriving a formula (by least squares) for projecting trend figures for 1965-66 to 1977-78. This formula was $y' = \$385 + \$18t$ (t =time in years, $t=1$ in 1957-58).

(3) Average daily attendance was calculated for 1968-69 to 1977-78 by assuming that the ratio of average daily attendance to projected fall enrollment in kindergarten through grade 12 will remain constant at the 1967-68 level of 92.8 percent.

(4) Total current expenditures (excluding effects of the Elementary and Secondary Education Act, 1965) allocated to public elementary and secondary school pupil costs (1967-68 dollars) were projected for 1965-66 to 1977-78 by multiplying the current expenditures per pupil, as projected in step (2), by the corresponding average daily attendance projected in step (3). These figures exclude expenditures for summer schools, adult education, and community colleges operated by school districts.

(5) Total current expenditures (excluding effects of the Elementary and Secondary Education Act, 1965) for all programs operated by school districts, including summer schools, adult education, and community colleges were projected for 1965-66 to 1977-78

by assuming that current expenditures for all programs remain constant at the 1967-68 rate of 103.5 percent of current expenditures allocated for public elementary and secondary school pupil costs.

(6) Current expenditures per pupil (including the Elementary and Secondary Education Act, 1965) allocated to public elementary and secondary pupil costs were projected by adding \$40 to the figures projected in step (2). (In 1967-68, the current expenditure per pupil reported by State departments of education was \$44 higher than the trend figure for 1967-68 derived in step (2).)

(7) Total current expenditures allocated to pupil costs (including the effects of the Elementary and Secondary Education Act of 1965) were projected by multiplying the current expenditures per pupil, as projected in step (6), by the corresponding average daily attendance projected in step (3).

(8) Total current expenditures for all programs operated by school districts (including the effects of the Elementary and Secondary Education Act) were projected by multiplying the figures in step (7) by 103.5 percent.

Salaries of instructional staff in regular public schools (tables 41, 27)

A large part of current expenditures for public elementary and secondary schools is for salaries of instructional staff (62 percent in 1966-67). Total expenditures for salaries of instructional staff (in 1967-68 dollars) increased from \$7.6 billion in 1957-58 to \$15.7 billion in 1967-68, and are expected to be \$22.5 billion in 1977-78. These increases are due to larger numbers of instructional staff and to higher average annual salaries. The amounts for 1965-66 to 1977-78 also reflect the larger number of instructional staff expected on account of the Elementary and Secondary Education Act of 1965.

The average annual salary of instructional staff (in 1967-68 dollars) increased from \$5,598 in 1957-58 to \$7,630 in 1967-68, and is expected to be \$9,677 in 1977-78. During the past 10 years, the average annual salary has been increasing about \$185 per year in 1967-68 dollars. The projected figure for 1977-78 (\$9,677) is based on the assumption that the 1957-58 to 1964-65 trend will continue to 1977-78.

Projected total and average annual salaries of instructional staff in public elementary and secondary schools are shown in table 41. The procedure was as follows:

(1) The average annual salary (y) was projected as a continuation of the 1957-58 to 1964-65 trend: $y' = \$5,400 + \$204t$ (t =time in years, $t=1$ in 1957-58).

(2) Total expenditures for salaries of instructional staff were then computed as the product of the average annual salary and the total number of instructional staff. (The total number of instructional staff was taken from table 27.)

Classroom construction and capital outlay by regular public elementary and secondary schools (tables 42, 43)

Capital outlay (in 1967-68 dollars) by public elementary and secondary schools, including the expenditures of State and local school building authorities, was \$17.8 billion for the 5-year period 1958-59 to 1962-63, and \$21 billion for the following 5-year period, 1963-64 to 1967-68. It is expected to be \$21.5 billion for 1968-69 to 1972-73 and a similar amount for 1973-74 to 1977-78.

Projected expenditures for capital outlay together with projections of classroom construction are shown in tables 42 and 43. They are not projections of need but are simply projections of the classroom construction and capital outlay expected in the light of the 1958-59 to 1967-68 trend. The procedure was as follows:

(1) The total number of rooms completed was projected on the basis of the 1958-59 to 1967-68 trend: $y' = 69,445 + 58t$ (t =time in years, $t=1$ in 1957-58). The basic data and projections are shown in table 42.

(2) The number of classrooms that would be completed on account of enrollment was assumed to be equal to the enrollment increases over each 5-year period divided by the median pupil-room ratios for 1964-65. These ratios were 27.4 for elementary and 27.5 for secondary schools.

(3) The number of classrooms that would be completed on account of current replacements (abandonments), migration, consolidation of school districts, and reduction

of crowded and unsatisfactory rooms was derived by subtracting the number to be completed on account of enrollment increases from the total number to be completed. (The number of rooms abandoned was 99,000 in the 5-year period 1963-64 to 1967-68, and 88,000 in the 5-year period 1958-59 to 1962-63).

(4) Capital outlay was projected by multiplying the number of rooms completed by the average capital outlay per room in the 1963-64 to 1967-68 period. This figure was \$60,000 per room in 1967-68 dollars.

The basic data and projections are shown in tables 42 and 43.

It should be noted that not all the capital outlay shown here represents construction. It was estimated that, in 1961-62, 2 percent of capital outlay was for transportation equipment, 10 percent for other equipment, and the remaining 88 percent was for land and buildings.

Data include 50 States and the District of Columbia for all years. Data are based mainly on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education, "Statistics of State School Systems," 1957-58, 1959-60, 1961-62, 1963-64, and 1965-66; "Enrollment, Teachers, and Schoolhousing," fall 1957 to fall 1963; "Statistics of Public Schools," fall 1964 to 1967; and "Bond Sales for Public School Purposes," 1960-61 to 1966-67.

Reason for construction (table 43)

Table 43 shows that we may expect a sharp decrease in the number of rooms to be completed on account of enrollment increases and a sharp increase in the number completed for other reasons. Other reasons include (1) replacements (abandonments), (2) migration factors (including school district reorganization), and (3) reduction of crowded and unsatisfactory rooms. Data limitations do not permit an exact analysis of these three factors; however, the way they might operate may be observed if the data for the past 5 years (1963-64 to 1967-68) are examined. During this period, a total of 349,000 rooms were completed and 99,000 were abandoned.

If it were assumed that the 99,000 abandoned rooms were all replaced, and that 210,000 of the completed rooms were used for taking care of enrollment increases, 40,000 rooms would be left that could have been used for taking care of migration and the reduction of crowded and unsatisfactory rooms ($349,000 - 99,000 - 210,000 = 40,000$). Since there are some indications that the number of crowded and unsatisfactory rooms did not change substantially during the 5-year period, it seems safe to assume that almost all these 40,000 rooms were used to take care of migration factors, and therefore, that about 139,000 rooms were completed on account of abandonments and migration together ($40,000 + 99,000 = 139,000$). If these 139,000 rooms were applied for migration and replacement to the projections, the number of rooms completed for reducing crowded and unsatisfactory classrooms would be approximately 171,000 in 1968-69 to 1972-73 and 216,000 in 1973-74 to 1977-78.

That is, in 1968-69 to 1972-73 the total classrooms to be completed (355,000) minus the number for enrollment increases (45,000) minus the number for migration and abandonments (139,000) equals the number for reducing crowded and unsatisfactory rooms (171,000); and comparable figures for 1973-74 to 1977-78 would be $355,000 - 139,000 = 216,000$ (enrollment increases are expected to be negligible) that could be applied to reduction of crowded and unsatisfactory rooms.

Figures derived in this way are not intended for use as firm estimates of reasons for construction because they are, in a sense, partly hypothetical. That is, they show numbers of rooms completed that could have been (but may not have been) completed for various reasons. Nevertheless, they throw some light on the probable reasons for past and future construction.

Crowded and unsatisfactory rooms

Indications that the number of crowded and unsatisfactory rooms was not reduced during the 1962-66 period are shown in Office of Education studies on school facilities for 1962 and 1964-65.²

² George J. Collins, U.S. Department of Health, Education, and Welfare, Office of Education "National Inventory of School Facilities and Personnel, Spring 1962." George J. Collins and William L. Stormer, "Condition of Public School Plants, 1964-65."

The following information was selected from those two studies:

Item	1962	1964-65
Number of additional public school classrooms needed:		
To eliminate off-site.....	6, 000	14, 000
To eliminate nonpermanent.....	31, 000	31, 000
To eliminate improvised or makeshift.....	28, 000	31, 000
To eliminate rooms in buildings with 4 or more defects.....	NA	158, 000
To achieve a pupil-room ratio for all students of:		
27.6 elementary and 26.3 secondary pupils.....	117, 000	-----
27.4 elementary and 27.5 secondary pupils.....	-----	98, 000
25 elementary and 20 secondary pupils.....	272, 000	285, 000
U.S. median pupil-room ratio.....	¹ 27. 6	¹ 27. 4
	² 26. 3	² 27. 5

NA Not available. ¹ Elementary schools. ² Secondary schools.

In view of the above figures, it seems reasonable to assume that there was very little change in the number of crowded and unsatisfactory rooms in the 1963-64 to 1967-68 period and that the 99,000 completed in excess of those that could have been used for taking care of enrollment increases and current replacement (abandonments), were used primarily to take care of migration factors.

In 1964-65 the number of additional rooms which would eliminate the use of off-site, non-permanent, and improvised or makeshift rooms was 76,000 and the number for replacing rooms in buildings with four or more defects was 158,000. Another 98,000 rooms would be needed to permit all public school pupils to be in rooms with no more than 27 pupils. If they were to be accommodated in rooms with no more than 25 elementary or 20 secondary pupils, the additional number needed would be 285,000. These figures are not intended to show the total additional rooms needed but are presented simply to show that the approximately 387,000 rooms which could be completed for replacing crowded and unsatisfactory rooms in the next 10 years are little more than the minimum number needed when compared with data from the 1964-65 study.

Interest expenditures by regular public elementary and secondary schools (table 44)

Annual expenditures (in 1967-68 dollars) for interest by public elementary and secondary schools increased from \$408 million in 1957-58 to over \$950 million in 1967-68 and are expected to be almost \$1.6 billion in 1977-78. Projected interest is shown in table 44. The projections are based on the assumption that the 1957-58 to 1967-68 upward trend will continue through 1977-78. In spite of the fact that capital outlay is expected to level off in the next decade, this assumption seems reasonable because interest payments continue 20 years or more after construction, resulting in debt being incurred at a greater rate than it is being eliminated. The trend formula for projecting interest (y) in 1967-68 dollars was as follows: $y' = \$381 + \$56t$ (t =time in years, $t=1$ in 1957-58).

Nonpublic elementary and secondary schools (tables 38, 39, 27)

Expenditure data for nonpublic elementary and secondary schools comparable to those for public schools are nonexistent. The main reason is that it is extremely difficult to arrive at a universally accepted method for determining the value of donated services for nonpublic schools, even if data on actual expenditures were collected. These donated services make up a substantial part of nonpublic school resources, especially in the elementary and secondary schools operated by religious orders. In 1965-66, over three-fourths of the 200,000 nonpublic school teachers belonged to religious orders of the Roman Catholic Church. Also it might be argued that many of the remaining nonpublic school teachers, whose salaries generally run lower than those in public schools, really donated part of their services.

Although it is difficult to arrive at national estimates of nonpublic school expenditures that everyone will accept, the substantial contribution of nonpublic elementary and secondary schools cannot be ignored when total expenditures for education are being considered. Therefore, illustrative estimates of nonpublic elementary and secondary school expenditures were developed rather arbitrarily and are shown in table 38. They are based on the assumption that the cost per teacher (including donated facilities and services) in nonpublic schools is the same as in public schools.

The formula was as follows: $y = xp$ (x =ratio of nonpublic to public school teachers, and p =public school expenditures). The ratio of nonpublic to public school teachers was slightly over 13 percent during the 1957 to 1967 decade and is expected to be slightly over 12 percent during the 1967 to 1977 decade. The numbers upon which these ratios were computed are shown in table 27.

Previous Office of Education estimates were based on the assumption that per pupil costs in nonpublic were the same as in public schools. Since the average pupil-teacher ratio is higher in nonpublic than in public schools, the previous estimates were higher than those shown here. Both types of estimates are, in a sense, hypothetical. That is, one showed what it would cost to educate nonpublic elementary and secondary school children if they were enrolled in public school and if the public school pupil-teacher ratio were maintained; and the other type, shown in tables 38 and 39, shows the cost if the pupil-teacher ratio were maintained at the nonpublic school level.

Current expenditures of institutions of higher education (tables 45, 38)

Annual current expenditures of institutions of higher education (in 1967-68 dollars) increased from \$5.1 billion in 1957-58 to \$15.3 billion in 1967-68, a threefold increase. They are expected to reach \$27.8 billion by 1977-78, or nearly double during the projected 10-year period. The projected data are based largely upon expected increases in enrollment and upon the trend of increasing costs per student expressed in constant dollars. Thus, while enrollment is not expected to increase at as rapid a rate as during the past 10 years, this factor will be more than offset by increasing expenditures per student. The result is an expected or projected constant dollar increase of \$12.5 billion over the next 10 years compared to a constant dollar increase of \$10.2 billion over the past 10 years (see table 45). When expressed in terms of current expenditures per full-time equivalent student, the data are as follows:

Item	1957-58	1967-68	1977-78
Total current expenditures.....	\$2, 074	\$2, 778	\$3, 344
Publicly controlled institutions.....	2, 011	2, 327	2, 673
Nonpublicly controlled institutions.....	2, 163	3, 772	5, 270

Current expenditures are divided into four functional components: student education, related activities, organized research, and auxiliary enterprises and student aid. "Student education" encompasses general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance. Expenditures for student education were projected by use of the trend of annual expenditures per full-time equivalent student over the 10-year base period and in conjunction with the projected enrollment of such students (see table 45). When expressed in terms of current expenditure per full-time equivalent student, the data are as follows:

Item	1957-58	1967-68	1977-78
Current expenditure for student education.....	\$1, 257	\$1, 604	\$1, 883
Publicly controlled institutions.....	1, 263	1, 451	1, 626
Nonpublicly controlled institutions.....	1, 249	1, 942	2, 624

Current expenditures for "student education," related activities, and organized research are commonly known as current expenditures for educational and general purposes and these expenditures per full-time equivalent student are as follows:

Item	1957-58	1967-68	1977-78
Expenditures for educational and general purposes.....	\$1, 722	\$2, 315	\$2, 696
Publicly controlled institutions.....	1, 705	1, 968	2, 172
Nonpublicly controlled institutions.....	1, 746	3, 078	4, 205

The institutions of higher education engage in organized research and related activities and

auxiliary enterprises in widely varying degrees. Thus, only the "student education" component expressed as expenditure per full-time equivalent student can be considered a norm for all institutions. Per student data for the United States for total current expenditures and for educational and general expenditures are presented as general interest items and not as institutional norms.

Related activities, auxiliary enterprises, and student aid expenditures were projected on the basis of their percentage relationship to student education during the base period. These functions are obviously closely related to trends in enrollment, but allowance had to be made for the change during the base period in their percentage relationship to student education. The base period data indicate a trend toward slightly more emphasis on these activities. The exception is expenditures for auxiliary enterprises in nonpublicly controlled institutions which have decreased slightly during the base period in relation to student education.

Item	Percent		
	1957-58	1967-68	1977-78
Related activities:			
Publicly controlled institutions.....	9.83	10.09	10.38
Nonpublicly controlled institutions.....	8.64	8.89	9.17
Auxiliary enterprises:			
Publicly controlled institutions.....	26.72	27.89	29.45
Nonpublicly controlled institutions.....	33.29	31.07	28.93
Student aid:			
Publicly controlled institutions.....	2.95	4.14	5.33
Nonpublicly controlled institutions.....	7.75	10.65	13.62

The projection of expenditures for organized research, as a component of current expenditures, was done without regard to enrollment or to relationship with expenditures for student education. In view of the extremely variable nature of this component's relation to industry and education, we have projected on the basis of the constant dollar trend of expenditures for organized research during the base period. This projection may well be quite conservative, especially for the publicly controlled institutions which undoubtedly have the potential to engage in organized research to a far greater degree than performance over the past 10 years would indicate (see table 45).

Capital outlay by institutions of higher education (tables 47, 38)

Annual capital outlay of institutions of higher education (in 1967-68 dollars) increased from \$1.6 billion during 1957-58 to an estimated \$3.5 billion during 1967-68. Capital outlay over the entire 10-year base period of 1958-59 to 1967-68 amounted to an estimated total of \$28.0 billion (in 1967-68 dollars) and is expected to reach a total of \$28.2 billion (in 1967-68 dollars) over the 10-year projected period of 1968-69 to 1977-78. The decline in annual projected capital outlay, from \$3.3 billion in 1968-69 to \$2.5 billion in 1977-78 can be attributed to declining numbers of additional students projected for these years.

Base period estimates of capital outlay were made on the basis of reported book value of plant at the beginning and end of each biennial reporting year and converted to 1967-68 dollars. An amount equal to 1 percent of the value of plant for each year was added as a conservative estimate of replacement and rehabilitation. The capital outlay for the entire base period was equated to the additional numbers of students for the same period. Projected capital outlay was then equated to the projected additional numbers of students for the projected ten-year period. The historical data showed clearly that capital outlay could not be related to increased enrollment on an annual basis. The shortest reasonably reliable period of time proved to be 5 years and that an annual figure could be interpolated by utilizing a moving average of enrollment increases although considerably less reliable than for a 5-year period. We would emphasize, then, that the annual capital outlay shown in tables 38 and 47 be regarded as interpolations and that the 1967-68 constant dollar aspect of the projections be kept in mind.

Expenditures for interest by institutions of higher education (table 38)

Data on expenditures for interest by institutions of higher education are incomplete and cannot be shown as a separate item. The major portion of expenditures for interest is included with the current expenditures shown in table 38.

Figure 7. — Total expenditures (1967-68 dollars), by regular elementary and secondary day schools: United States, 1957-58 to 1977-78

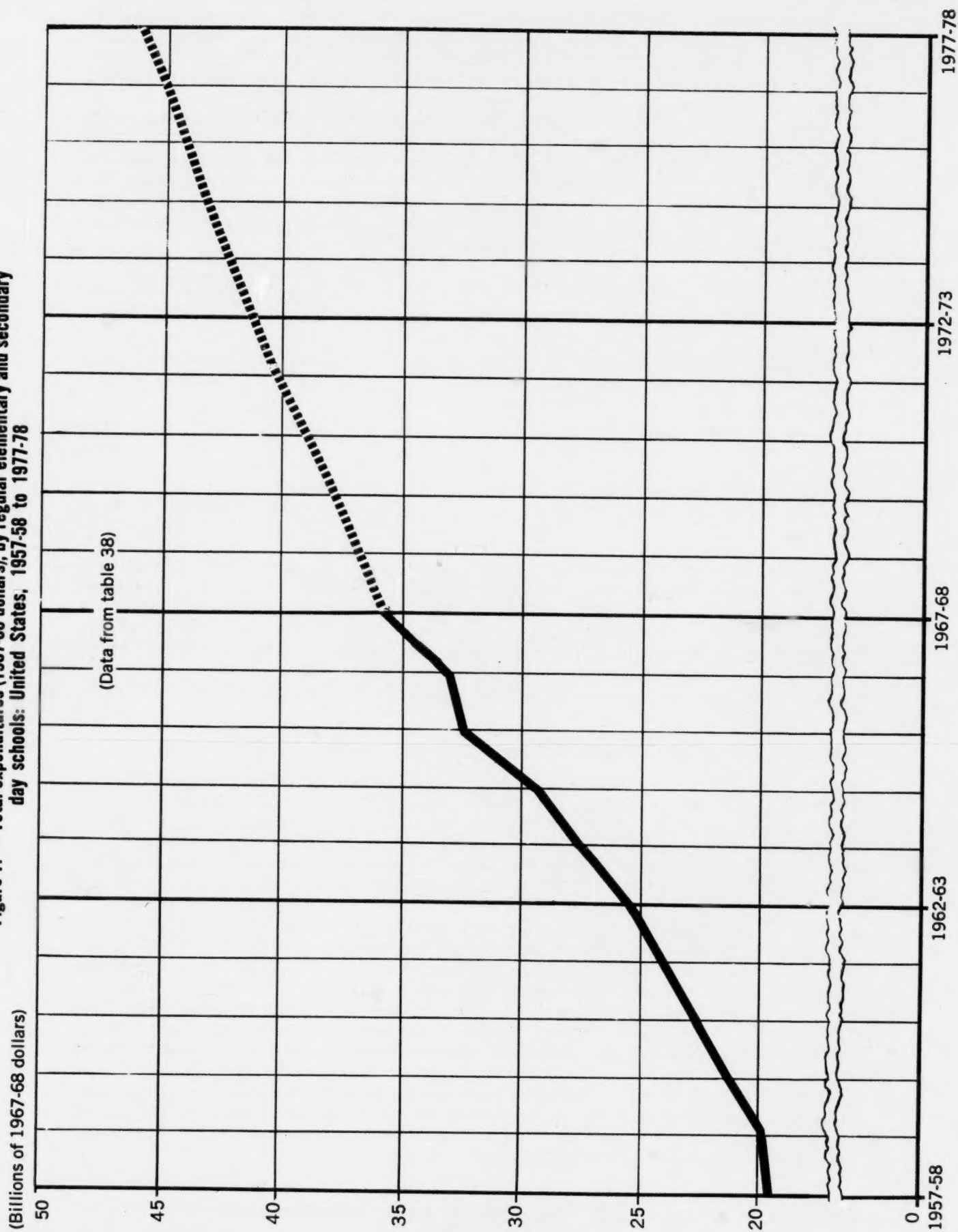


Figure 8. — Total expenditures (1967-68 dollars), by institutions of higher education:
United States, 1957-58 to 1977-78

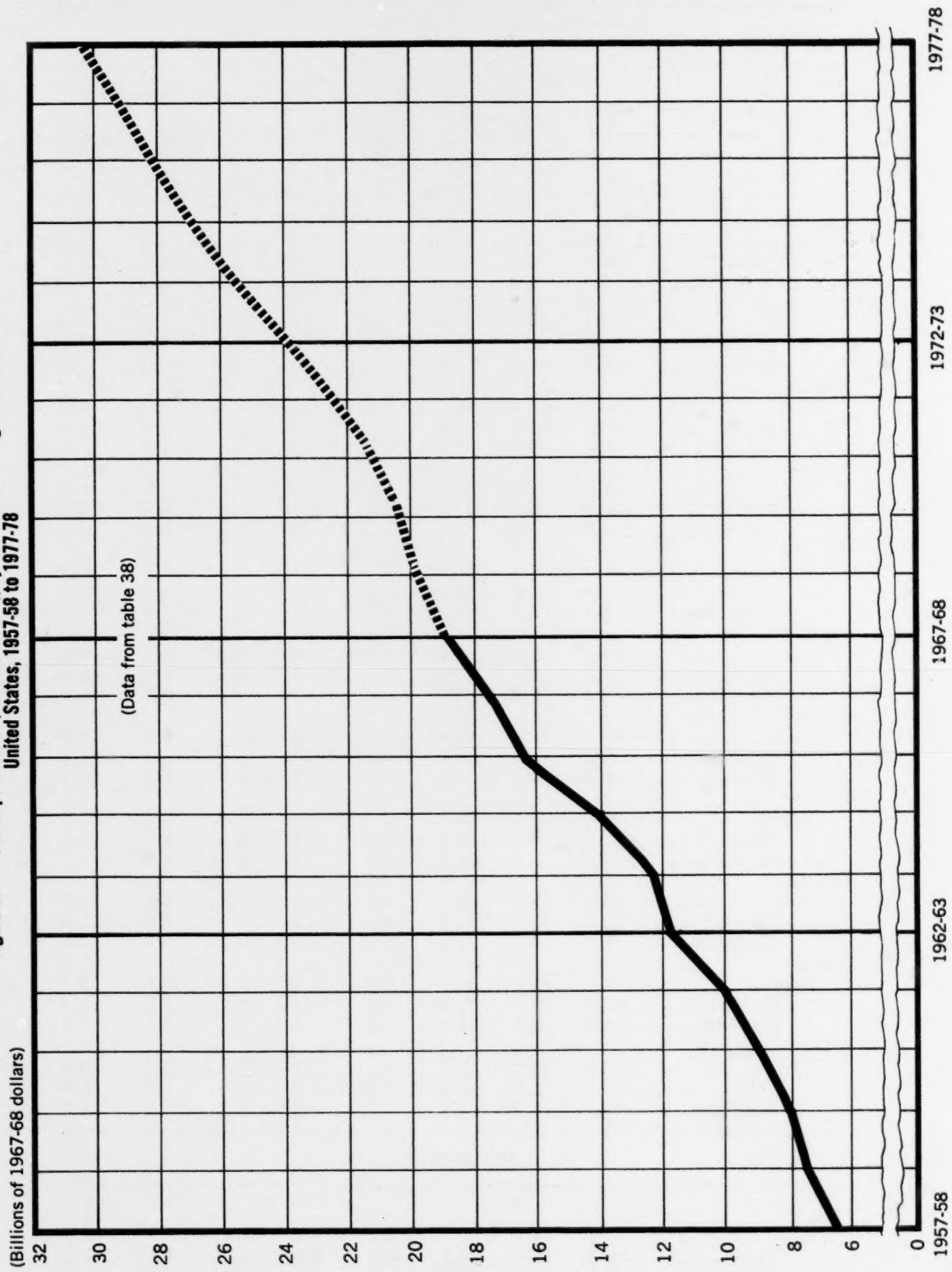


TABLE 38.—Expenditures (1967-68 dollars) of regular educational institutions, by instructional level and institutional control: United States, 1957-58 to 1977-78

[In billions of 1967-68 dollars]

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Non- public school expenditures are estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expendi- tures ³	Capital outlay ⁴	Interest ⁵	Total	Current expendi- tures ⁶	Capital outlay ⁷
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1957-58:								
Total.....	26.1	19.4	14.0	4.9	0.5	6.7	5.1	1.6
Public.....	21.0	17.1	12.4	4.3	.4	3.9	2.9	1.0
Nonpublic.....	5.1	2.3	1.6	.6	.1	2.8	2.2	.6
1958-59:								
Total.....	27.1	19.6	15.2	3.8	.6	7.5	5.7	1.8
Public.....	21.6	17.4	13.5	3.4	.5	4.2	3.2	1.0
Nonpublic.....	5.5	2.2	1.7	.4	.1	3.3	2.5	.8
1959-60:								
Total.....	29.3	21.3	16.4	4.2	.7	8.0	6.2	1.8
Public.....	23.3	18.8	14.5	3.7	.6	4.5	3.4	1.1
Nonpublic.....	6.0	2.5	1.9	.5	.1	3.5	2.8	.7
1960-61:								
Total.....	31.7	22.5	17.6	4.2	.7	9.2	7.0	2.2
Public.....	24.8	19.8	15.5	3.7	.6	5.0	3.8	1.2
Nonpublic.....	6.9	2.7	2.1	.5	.1	4.2	3.2	1.0
1961-62:								
Total.....	34.2	24.3	19.3	4.2	.8	9.9	7.8	2.1
Public.....	26.8	21.3	16.9	3.7	.7	5.5	4.3	1.2
Nonpublic.....	7.4	3.0	2.4	.5	.1	4.4	3.5	.9
1962-63:								
Total.....	36.9	25.3	20.7	3.8	.8	11.6	8.6	3.0
Public.....	28.7	22.1	18.1	3.3	.7	6.6	4.7	1.9
Nonpublic.....	8.2	3.2	2.6	.5	.1	5.0	3.9	1.1
1963-64:								
Total.....	39.9	27.4	22.3	4.2	.9	12.5	9.6	2.9
Public.....	31.1	24.0	19.5	3.7	.8	7.1	5.3	1.8
Nonpublic.....	8.8	3.4	2.8	.5	.1	5.4	4.3	1.1
1964-65:								
Total.....	43.8	29.5	23.8	4.8	.9	14.3	10.8	3.5
Public.....	34.2	25.8	20.8	4.2	.8	8.4	6.0	2.4
Nonpublic.....	9.6	3.7	3.0	.6	.1	5.9	4.8	1.1
1965-66:								
Total.....	48.9	32.7	26.3	5.4	1.0	16.2	12.5	3.7
Public.....	38.2	28.7	23.1	4.7	.9	9.5	7.0	2.5
Nonpublic.....	10.7	4.0	3.2	.7	.1	6.7	5.5	1.2
1966-67:								
Total.....	50.6	33.3	27.4	4.8	1.1	17.3	13.8	3.5
Public.....	39.6	29.4	24.2	4.2	1.0	10.2	7.8	2.4
Nonpublic.....	11.0	3.9	3.2	.6	.1	7.1	6.0	1.1
1967-68:								
Total.....	54.3	35.5	29.7	4.7	1.1	18.8	15.3	3.5
Public.....	42.7	31.5	26.3	4.2	1.0	11.2	8.8	2.4
Nonpublic.....	11.6	4.0	3.4	.5	.1	7.6	6.5	1.1
PROJECTED								
1968-69:								
Total.....	56.7	36.8	30.8	4.9	1.1	19.9	16.6	3.3
Public.....	44.5	32.6	27.3	4.3	1.0	11.9	9.6	2.3
Nonpublic.....	12.2	4.2	3.5	.6	.1	8.0	7.0	1.0

See footnotes at end of table.

TABLE 38.—Expenditures (1967-68 dollars) of regular educational institutions, by instructional level and institutional control: United States, 1957-58 to 1977-78—Continued

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expendi- tures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expendi- tures ³	Capital outlay ⁴	Interest ⁵	Total	Current expendi- tures ⁶	Capital outlay ⁷
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PROJECTED								
1969-70:								
Total.....	58.3	37.9	31.9	4.8	1.2	20.4	17.5	2.9
Public.....	46.0	33.8	28.4	4.3	1.1	12.2	10.1	2.1
Nonpublic.....	12.3	4.1	3.5	.5	.1	8.2	7.4	.8
1970-71:								
Total.....	60.3	39.0	33.0	4.8	1.2	21.3	18.5	2.8
Public.....	47.6	34.8	29.4	4.3	1.1	12.8	10.7	2.1
Nonpublic.....	12.7	4.2	3.6	.5	.1	8.5	7.8	.7
1971-72:								
Total.....	62.7	40.2	34.1	4.8	1.3	22.5	19.8	2.7
Public.....	49.3	35.8	30.3	4.3	1.2	13.5	11.5	2.0
Nonpublic.....	13.4	4.4	3.8	.5	.1	9.0	8.3	.7
1972-73:								
Total.....	65.2	41.3	35.0	4.8	1.5	23.9	21.2	2.7
Public.....	51.1	36.7	31.1	4.3	1.3	14.4	12.4	2.0
Nonpublic.....	14.1	4.6	3.9	.5	.2	9.5	8.8	.7
1973-74:								
Total.....	67.6	42.1	35.8	4.8	1.5	25.5	22.6	2.9
Public.....	52.7	37.4	31.8	4.3	1.3	15.3	13.2	2.1
Nonpublic.....	14.9	4.7	4.0	.5	.2	10.2	9.4	.8
1974-75:								
Total.....	69.9	43.1	36.7	4.8	1.6	26.8	23.9	2.9
Public.....	54.4	38.3	32.6	4.3	1.4	16.1	14.0	2.1
Nonpublic.....	15.5	4.8	4.1	.5	.2	10.7	9.9	.8
1975-76:								
Total.....	72.0	43.9	37.5	4.8	1.6	28.1	25.3	2.8
Public.....	56.0	39.0	33.3	4.3	1.4	17.0	14.9	2.1
Nonpublic.....	16.0	4.9	4.2	.5	.2	11.1	10.4	.7
1976-77:								
Total.....	74.2	45.0	38.5	4.8	1.7	29.2	26.6	2.6
Public.....	57.7	40.0	34.2	4.3	1.5	17.7	15.7	2.0
Nonpublic.....	16.5	5.0	4.3	.5	.2	11.5	10.9	.6
1977-78:								
Total.....	76.3	46.0	39.4	4.8	1.8	30.3	27.8	2.5
Public.....	59.3	40.9	35.0	4.3	1.6	18.4	16.5	1.9
Nonpublic.....	17.0	5.1	4.4	.5	.2	11.9	11.3	.6

¹ Includes the effect of the Elementary and Secondary Education Act of 1965. Excludes expenditures for residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. All nonpublic elementary and secondary school expenditures shown here are estimated on the basis of expenditures per teacher in public elementary and secondary schools.

² Includes expenditures for subcollegiate departments of institutions of higher education, estimated at \$82 million in 1967-68. Includes expenditures for interest from current funds and excludes interest paid from plant funds. (An estimated \$160 million was expended for total interest in 1967-68.)

³ Includes current expenditures of public elementary and secondary school systems for community services, summer schools, community colleges, and adult education. Interest

is included in the estimated current expenditures of nonpublic schools.

⁴ Includes capital outlay of State and local school building authorities.

⁵ Interest for nonpublic schools is based on interest for public schools.

⁶ Includes expenditures for interest from current funds. Excludes expenditures from current funds for capital outlay.

⁷ The estimated annual capital outlay data shown here include estimated expenditures for replacement and rehabilitation.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are a summary of tables 40 through 47, each of which indicate source of data.

TABLE 39.—*Expenditures (current dollars) of regular educational institutions, by instructional level and institutional control: United States, 1957-58 to 1969-70*

[In billions of current dollars]

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expendi- tures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expendi- tures ³	Capital outlay ⁴	Interest ⁵	Total	Current expendi- tures ⁶	Capital outlay ⁷
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1957-58:								
Total.....	21.0	15.7	11.8	3.5	0.4	5.3	4.2	1.1
Public.....	16.9	13.8	10.4	3.1	.3	3.1	2.4	.7
Nonpublic.....	4.1	1.9	1.4	.4	.1	2.2	1.8	.4
1958-59:								
Total.....	22.4	16.2	12.9	2.8	.5	6.2	4.9	1.3
Public.....	17.8	14.3	11.4	2.5	.4	3.5	2.8	.7
Nonpublic.....	4.6	1.9	1.5	.3	.1	2.7	2.1	.6
1959-60:								
Total.....	24.6	17.9	14.1	3.2	.6	6.7	5.4	1.3
Public.....	19.6	15.8	12.5	2.8	.5	3.8	3.0	.8
Nonpublic.....	5.0	2.1	1.6	.4	.1	2.9	2.4	.5
1960-61:								
Total.....	27.0	19.3	15.4	3.3	.6	7.7	6.0	1.7
Public.....	21.3	17.0	13.6	2.9	.5	4.3	3.3	1.0
Nonpublic.....	5.7	2.3	1.8	.4	.1	3.4	2.7	.7
1961-62:								
Total.....	29.6	21.1	17.0	3.4	.7	8.5	6.8	1.7
Public.....	23.2	18.5	14.9	3.0	.6	4.7	3.7	1.0
Nonpublic.....	6.4	2.6	2.1	.4	.1	3.8	3.1	.7
1962-63:								
Total.....	32.6	22.3	18.5	3.1	.7	10.3	7.8	2.5
Public.....	25.4	19.5	16.2	2.7	.6	5.9	4.3	1.6
Nonpublic.....	7.2	2.8	2.3	.4	.1	4.4	3.5	.9
1963-64:								
Total.....	35.9	24.6	20.3	3.5	.8	11.3	8.8	2.5
Public.....	27.9	21.5	17.7	3.1	.7	6.4	4.9	1.5
Nonpublic.....	8.0	3.1	2.6	.4	.1	4.9	3.9	1.0
1964-65:								
Total.....	40.1	27.0	21.8	4.2	.9	13.1	10.0	3.1
Public.....	31.2	23.6	19.1	3.7	.8	7.6	5.5	2.1
Nonpublic.....	8.9	3.4	2.7	.5	.1	5.5	4.5	1.0
1965-66: ⁸								
Total.....	45.2	30.2	24.5	4.8	.9	15.0	11.7	3.3
Public.....	35.3	26.5	21.5	4.2	.8	8.8	6.6	2.2
Nonpublic.....	9.9	3.7	3.0	.6	.1	6.2	5.1	1.1
1966-67: ⁸								
Total.....	48.8	31.9	26.4	4.5	1.0	16.9	13.5	3.4
Public.....	38.2	28.3	23.4	4.0	.9	9.9	7.6	2.3
Nonpublic.....	10.6	3.6	3.0	.5	.1	7.0	5.9	1.1
1967-68: ⁸								
Total.....	54.3	35.5	29.7	4.7	1.1	18.8	15.3	3.5
Public.....	42.7	31.5	26.3	4.2	1.0	11.2	8.8	2.4
Nonpublic.....	11.6	4.0	3.4	.5	.1	7.6	6.5	1.1

See footnotes at end of table.

TABLE 39.—Expenditures (current dollars) of regular educational institutions, by instructional level and institutional control: United States, 1957-58 to 1969-70—Continued

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expendi- tures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expendi- tures ³	Capital outlay ⁴	Interest ⁵	Total	Current expendi- tures ⁶	Capital outlay ⁷
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PROJECTED								
1968-69: ⁸								
Total.....	58.2	37.8	31.6	5.1	1.1	20.4	17.0	3.4
Public.....	45.7	33.5	28.0	4.5	1.0	12.2	9.8	2.4
Nonpublic.....	12.5	4.3	3.6	.6	.1	8.2	7.2	1.0
1969-70: ⁸								
Total.....	61.8	40.2	33.7	5.3	1.2	21.6	18.4	3.2
Public.....	48.7	35.8	30.0	4.7	1.1	12.9	10.6	2.3
Nonpublic.....	13.1	4.4	3.7	.6	.1	8.7	7.8	.9

¹ Excludes expenditures for residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. See text table on expenditures by source of funds for data on these schools. All nonpublic elementary and secondary school expenditures shown here are estimated on the basis of expenditures per teacher in public elementary and secondary schools.

² Includes expenditures for subcollegiate departments of institutions of higher education, estimated at \$82 million in 1967-68. Includes expenditures for interest from current funds and excludes interest paid from plant funds. (An estimated \$160 million was expended for total interest in 1967-68.)

³ Includes current expenditures of public elementary and secondary school systems for community services, summer schools, community colleges, and adult education. Interest is

included in the estimated current expenditures of nonpublic schools.

⁴ Includes capital outlay of State and local school building authorities.

⁵ Interest for nonpublic schools is based on interest for public schools.

⁶ Includes expenditures for interest from current funds. Excludes expenditures from current funds for capital outlay.

⁷ The estimated annual capital outlay data shown here include estimated expenditures for replacement and rehabilitation.

⁸ Includes effect of Elementary and Secondary Education Act of 1965.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are a summary of tables 40 through 47, each of which indicates source of data.

TABLE 40.—Current expenditures of public school systems: United States, 1957-58 to 1977-78

Year	Average daily attendance (in thousands)	Allocated to pupil costs ¹				All programs ²	
		Per pupil in average daily attendance		Total (in billions)		Total (in billions)	
		Current dollars	1967-68 dollars	Current dollars	1967-68 dollars	Current dollars	1967-68 dollars
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58.....	29, 875	\$341. 14	\$406. 15	\$10. 2	\$12. 1	\$10. 4	\$12. 4
1958-59 ³	31, 184	357. 71	420. 11	11. 2	13. 1	11. 4	13. 5
1959-60.....	32, 477	375. 14	434. 45	12. 2	14. 1	12. 5	14. 5
1960-61 ³	33, 524	396. 50	453. 28	13. 3	15. 2	13. 6	15. 5
1961-62.....	34, 682	418. 50	473. 64	14. 5	16. 4	14. 9	16. 9
1962-63 ³	35, 882	439. 00	490. 90	15. 8	17. 6	16. 2	18. 1
1963-64.....	37, 405	460. 24	507. 51	17. 2	19. 0	17. 7	19. 5
1964-65 ³	38, 600	484. 00	526. 93	18. 6	20. 3	19. 1	20. 8
1965-66.....	39, 159	536. 00	571. 17	21. 0	22. 4	21. 5	23. 1
1966-67 ⁴	39, 759	569. 00	588. 10	22. 6	23. 4	23. 4	24. 2
1967-68.....	40, 708	623. 00	623. 00	25. 4	25. 4	26. 3	26. 3

A. INCLUDES THE EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ACTUAL							
1965-66.....	39, 159	536. 00	571. 17	21. 0	22. 4	21. 5	23. 1
1966-67 ⁴	39, 759	569. 00	588. 10	22. 6	23. 4	23. 4	24. 2
1967-68.....	40, 708	623. 00	623. 00	25. 4	25. 4	26. 3	26. 3

PROJECTED ⁵
(Based on assumption that current expenditure per pupil will be \$40 higher than trend)

1968-69.....	41, 500	* 653. 00	636. 00	* 27. 1	26. 4	* 28. 0	27. 3
1969-70.....	42, 000	* 689. 00	654. 00	* 28. 9	27. 5	* 30. 0	28. 4
1970-71.....	42, 300	-----	671. 00	-----	28. 4	-----	29. 4
1971-72.....	42, 500	-----	689. 00	-----	29. 3	-----	30. 3
1972-73.....	42, 500	-----	706. 00	-----	30. 0	-----	31. 1
1973-74.....	42, 500	-----	723. 00	-----	30. 7	-----	31. 8
1974-75.....	42, 500	-----	741. 00	-----	31. 5	-----	32. 6
1975-76.....	42, 500	-----	758. 00	-----	32. 2	-----	33. 3
1976-77.....	42, 600	-----	775. 00	-----	33. 0	-----	34. 2
1977-78.....	42, 700	-----	793. 00	-----	33. 9	-----	35. 0

See footnotes at end of table.

TABLE 40.—Current expenditures of public school systems: United States, 1957-58 to 1977-78—Con.

Year	Average daily attendance (in thousands)	Allocated to pupil costs ¹		All programs ²	
		Per pupil in average daily attendance		Total (in billions)	
		Current dollars	1957-58 dollars	Current dollars	1957-58 dollars
(1)	(2)	(3)	(4)	(5)	(6)
B. EXCLUDES THE EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965					
ESTIMATED³					
1965-66.....	39,159	498.00	531.00	19.5	39.5
1966-67 ⁴	39,759	530.00	545.00	21.1	21.5
1967-68.....	40,708	583.00	583.00	23.7	24.5
PROJECTED⁵					
(Based on continuation of 1957-58 to 1964-65 trend in current expenditures per pupil)					
1968-69.....	41,500	*612.00	596.00	*25.4	24.7
1969-70.....	42,000	*647.00	614.00	*27.2	25.8
1970-71.....	42,300	.....	631.00	.....	26.7
1971-72.....	42,500	.....	649.00	.....	27.6
1972-73.....	42,500	.....	666.00	.....	28.3
1973-74.....	42,500	.....	683.00	.....	29.0
1974-75.....	42,500	.....	701.00	.....	29.8
1975-76.....	42,500	.....	718.00	.....	30.5
1976-77.....	42,600	.....	735.00	.....	31.3
1977-78.....	42,700	.....	753.00	.....	32.2

¹ Includes only the current expenditures for public day schools allocated to pupil costs, and excludes the other expenditures shown in footnote 3.

² Includes current expenditures for summer schools, adult education, and community colleges operated by school districts, in addition to expenditures allocable to pupil costs.

³ Estimated on the basis of actual enrollment and interpolated expenditures per pupil.

⁴ Derived from estimates furnished by States.

⁵ The projections of current expenditures of public school systems including the effect of the Elementary and Secondary Education Act of 1965 are based on the assumptions that: (1) The ratio of average daily attendance to full enrollment in grades K-12 of public schools (table 3) will remain constant at the 1957-58 level of 0.928; (2) current expenditures allocated to costs per pupil in average daily attendance will follow the 1957-58 to 1964-65 trend; (3) the ratio of current expenditures for all programs to current expenditures allocated to pupil costs will remain constant at the 1957-58 level of 1.08; and (4) an increase in expenditures of \$40 per pupil will be added to the trend expenditures outlined above as a result of the Elementary and Secondary Education Act of 1965.

⁶ Based on the assumption that the Consumer Price Index will follow the 1964-65 to 1967-68 trend through 1969-70.

⁷ Estimated, using the 1957-58 to 1964-65 trend.

⁸ The projections of current expenditures of public school systems including the effect of the Elementary and Secondary Education Act of 1965 are based on the first three assumptions outlined in footnote 5 above.

For methodological details see appendix table D and discussion in text.

NOTE.—Data are for 48 States and the District of Columbia for all years.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems" division (1957-58 through 1969-70); and (2) "Statistics of Public Schools," fall 1969 through 1967. Current expenditures were converted to 1957-58 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. For method of converting, see appendix table F.

The expenditures shown in this table include current expenditures for administration for State boards of education, State departments of education, and intermediate administrative units. Therefore, they are higher than those that exclude such expenditures.

TABLE 41.—Current expenditures for salaries of instructional staff in regular public elementary and secondary day schools: United States, 1957-58 to 1977-78

Year	Number of instructional staff ¹ (in thousands)	Salaries of instructional staff ²			
		Average annual salary		Total (in billions)	
		Current dollars	1967-68 dollars	Current dollars	1967-68 dollars
(1)	(2)	(3)	(4)	(5)	(6)
1957-58.....	1,356	\$4,702	\$5,598	\$6.4	\$7.6
1958-59 ³	1,411	4,940	5,802	7.0	8.2
1959-60.....	1,468	5,174	5,992	7.7	8.8
1960-61 ⁴	1,529	5,440	6,219	8.3	9.5
1961-62.....	1,591	5,700	6,451	9.2	10.3
1962-63 ⁵	1,647	5,930	6,631	9.8	10.9
1963-64.....	1,728	6,240	6,881	10.8	11.9
1964-65 ⁶	1,811	6,400	6,968	11.6	12.6
1965-66.....	1,887	6,907	7,360	13.0	13.9
1966-67 ⁷	1,977	7,110	7,349	14.1	14.5
1967-68 ⁸	2,055	7,630	7,630	15.7	15.7

A. INCLUDES EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 ON NUMBER OF STAFF

ACTUAL					
1965-66.....	1,887	6,907	7,360	13.0	13.9
1966-67 ⁷	1,977	7,110	7,349	14.1	14.5
1967-68 ⁸	2,055	7,630	7,630	15.7	15.7

PROJECTED ⁹					
1968-69.....	2,122	8,047	7,835	17.1	16.6
1969-70.....	2,165	8,475	8,039	18.3	17.4
1970-71.....	2,200	.....	8,244	.....	18.1
1971-72.....	2,225	.....	8,449	.....	18.8
1972-73.....	2,241	.....	8,654	.....	19.4
1973-74.....	2,261	.....	8,858	.....	20.0
1974-75.....	2,276	.....	9,063	.....	20.6
1975-76.....	2,295	.....	9,268	.....	21.3
1976-77.....	2,314	.....	9,473	.....	21.9
1977-78.....	2,330	.....	9,677	.....	22.5

See footnotes at end of table.

TABLE 41.—Current expenditures for salaries of instructional staff in regular public elementary and secondary day schools: United States, 1957-58 to 1977-78—Continued

Year	Number of instructional staff ¹ (in thousands)	Salaries of instructional staff ²			
		Average annual salary		Total (in billions)	
		Current dollars	1967-68 dollars	Current dollars	1967-68 dollars
(1)	(2)	(3)	(4)	(5)	(6)
B. EXCLUDES EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 ON NUMBER OF STAFF					
ESTIMATED ⁷					
1965-66.....	1,856	6,736	7,178	12.5	13.3
1966-67 ⁴	1,905	7,149	7,389	13.6	14.1
1967-68 ⁴	1,958	7,599	7,599	14.9	14.9
PROJECTED ⁵					
1968-69.....	2,010	⁶ 8,021	7,809	⁶ 16.1	15.7
1969-70.....	2,054	⁶ 8,455	8,020	⁶ 17.4	16.5
1970-71.....	2,088	-----	8,230	-----	17.2
1971-72.....	2,113	-----	8,440	-----	17.8
1972-73.....	2,129	-----	8,651	-----	18.4
1973-74.....	2,148	-----	8,861	-----	19.0
1974-75.....	2,163	-----	9,071	-----	19.6
1975-76.....	2,182	-----	9,173	-----	20.0
1976-77.....	2,200	-----	9,275	-----	20.4
1977-78.....	2,216	-----	9,377	-----	20.8

¹ Data on number of instructional staff were taken from table 27.

² The average annual salaries of instructional staff are about 3 percent higher than the salaries of classroom teachers.

³ Interpolated.

⁴ Estimates of salaries furnished by State education departments.

⁵ The projections of current expenditures for salaries of instructional staff in public elementary and secondary schools, including the effect of the Elementary and Secondary Education Act of 1965, are based on the following assumptions: (1) Average annual salaries will follow the 1957-58 to 1966-67 trend; (2) the ratio of instructional staff to classroom teachers in regular public schools will follow the 1957-64 trend (see Tables 23 and 27); and (3) funds provided by the Elementary and Secondary Education Act of 1965 will increase the number of instructional staff over the number expected on the basis of trend alone by approximately 100,000 each year.

⁶ Based on the assumption that the Consumer Price Index will follow the 1964-65 to 1967-68 trend through 1969-70.

⁷ Estimated, using the 1957-58 to 1964-65 trend.

The projections of current expenditures for salaries of instructional staff in public elementary and secondary schools, excluding the effect of the Elementary and Secondary Education Act of 1965, are based on the first two assumptions outlined in footnote 5 above.

For methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, Biennial Survey of Education in the United States," chapter 2 (1955-56 through 1957-58); "Statistics of State School Systems" circulars (1959-60 through 1965-66); and (3) "Statistics of Public Schools," fall 1964 through 1967.

Conversion to 1967-68 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. For method of converting see appendix table L.

TABLE 42.—Construction of public elementary and secondary school classrooms and capital outlay:
United States, 1957-58 to 1977-78

[Capital outlay includes expenditure of public school building authorities]

Year	Rooms completed	Fiscal year bond sales in millions of current dollars	School year capital outlay ¹				
			Current dollars			1967-68 dollars	
			Percent of bond sales	Total in millions	Per room	Total in millions	Per room
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957-58.....	72,070	\$2,420	128	\$3,104	\$43,100	\$4,300	\$59,700
1958-59 ²	69,543	1,948	128	2,500	36,000	3,400	48,900
1959-60.....	69,400	2,198	128	2,823	40,700	3,700	53,300
1960-61 ³	72,214	2,357	122	2,900	40,200	3,700	51,200
1961-62.....	72,089	2,568	116	2,987	41,400	3,700	51,300
1962-63 ⁴	65,300	2,274	119	2,700	41,300	3,300	50,500
1958-59 to 1962-63....	348,546	11,345	123	13,910	39,900	17,800	51,040
1963-64.....	69,300	2,570	121	3,135	45,200	3,700	53,400
1964-65 ⁵	65,200	2,823	125	3,700	56,700	4,200	64,400
1965-66 ⁵	72,600	2,883	132	4,219	58,100	4,700	64,700
1966-67 ⁵	71,000	3,254	133	4,000	56,300	4,200	59,200
1967-68 ⁵	71,000	3,000	140	4,200	59,200	4,200	59,200
1963-64 to 1967-68....	349,100	14,530	130	19,254	55,100	21,000	60,200
PROJECTED ⁷							
1968-69.....	71,000			\$4,500	\$63,400	4,300	60,000
1969-70.....	71,000			\$4,700	\$66,200	4,300	60,000
1970-71.....	71,000					4,300	60,000
1971-72.....	71,000					4,300	60,000
1972-73.....	71,000					4,300	60,000
1968-69 to 1972-73....	355,000					21,500	60,000
1973-74.....	71,000					4,300	60,000
1974-75.....	71,000					4,300	60,000
1975-76.....	71,000					4,300	60,000
1976-77.....	71,000					4,300	60,000
1977-78.....	71,000					4,300	60,000
1973-74 to 1977-78....	355,000					21,500	60,000

¹ In 1961-62, 2 percent of capital outlay was estimated to be for transportation equipment, 10 percent for other equipment, and the remaining 88 percent for land and buildings.

² Capital outlay was estimated at 128 percent of bond sales, the average for 1957-58 and 1959-60.

³ Capital outlay was estimated at 122 percent of bond sales, the average for 1959-60 and 1961-62.

⁴ Capital outlay was estimated at 119 percent of bond sales, the average for 1961-62 and 1963-64.

⁵ Capital outlay was estimated by State departments of education.

⁶ Bond sales were estimated on the basis of data for the first half of 1966-67.

⁷ Projections of construction of public elementary and secondary school classrooms and of capital outlay are based on the assumptions that: (1) The total number of rooms constructed will be 71,000 per year, projected on the basis of the 1957-58 to

1966-67 trend; and (2) the capital outlay per room will remain constant at the 1963-64 through 1967-68 average of \$60,000 per room in 1967-68 dollars.

⁸ Based on the assumption that the Construction Cost Index will follow the 1964-65 to 1967-68 trend through 1969-70.

For further methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, 1957-58"; (2) "Enrollment, Teachers, and Schoolhousing" (fall 1967 to fall 1963); (3) "Statistics of Public Schools," fall 1964 through 1967; (4) "Bond Sales for Public School Purposes" (1960-61 to 1966-67). Conversion to 1967-68 dollars was based on the American Appraisal Co. Construction Cost Index. For method of converting, see appendix table P.

TABLE 43.—Construction of public elementary and secondary school classrooms and capital outlay, by reason for construction: United States, 1958-59 to 1977-78

Reason for construction	Number of classrooms			
	Estimated		Projected	
	1958-59 to 1962-63	1963-64 to 1967-68	1968-69 to 1972-73	1973-74 to 1977-78
Total.....	348, 546	349, 100	355, 000	355, 000
Increased enrollment.....	220, 000	210, 000	45, 000	-----
Current replacement (abandonments), migration, consolidation of school districts, reduction of crowded and unsatisfactory rooms, and other factors.....	128, 546	139, 100	310, 000	355, 000
Capital outlay of public elementary and secondary school systems and State and local public school building authorities				
(In billions of 1966-67 dollars)				
Total.....	\$22. 1	\$21. 0	\$21. 5	\$21. 5
Increased enrollment.....	13. 9	12. 6	2. 7	-----
Current replacement (abandonments), migration, consolidation of school districts, reduction of crowded and unsatisfactory rooms, and other factors.....	8. 2	8. 4	18. 8	21. 5

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: See footnotes 19 to 21 in appendix table D.

For method of projecting the number of classrooms to be

constructed by reason for construction, see footnotes 22 to 25 in appendix table D.

For method of projecting capital outlay required for construction, see footnotes 26 and 27 in appendix table D.

TABLE 44.—Expenditures for interest by public elementary and secondary school systems: United States, 1957-58 to 1977-78

[In millions]

Year	Total interest including payments to schoolhousing authorities or similar agencies	
	Current dollars	1967-68 dollars
(1)	(2)	(3)
1957-58.....	\$343	\$408
1958-59 ¹	416	489
1959-60.....	490	567
1960-61 ¹	539	616
1961-62.....	588	665
1962-63 ¹	644	720
1963-64.....	701	773
1964-65 ²	761	829
1965-66.....	821	875
1966-67 ²	949	981
1967-68 ²	950	950
PROJECTED ³		
1968-69.....	⁴ 1, 037	1, 010
1969-70.....	⁴ 1, 128	1, 070
1970-71.....		1, 131
1971-72.....		1, 191
1972-73.....		1, 251
1973-74.....		1, 311
1974-75.....		1, 372
1975-76.....		1, 432
1976-77.....		1, 492
1977-78.....		1, 552

¹ Interpolated.

² Estimates furnished by State education departments.

³ Projections of expenditures for interest are based on the assumption that these expenditures will follow the 1957-58 to 1967-68 trend.

⁴ Based on the assumption that the Consumer Price Index will follow the 1964-65 to 1967-68 trend through 1969-70.

For methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia

for all years.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," 1957-58 to 1965-66; and (2) "Statistics of Public Schools," fall 1964 through fall 1967. Conversion to 1967-68 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor.

For method of converting, see appendix table P.

TABLE 45.—Expenditures from current funds and total current expenditures (1967-68 dollars) by institutions of higher education: United States, 1957-58 to 1977-78

[Amounts in billions of 1967-68 dollars]

Year and control	Expenditure for educational and general purposes				Expenditure for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Student education ¹	Organized research	Related activities ²	Total				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1957-58:								
Total.....	\$3.1	\$0.9	\$0.3	\$4.3	\$1.0	\$5.3	\$0.2	\$5.1
Public.....	1.8	.5	.2	2.5	.5	3.0	.1	2.9
Nonpublic.....	1.3	.4	.1	1.8	.5	2.3	.1	2.2
1958-59: ⁵								
Total.....	3.4	1.0	.3	4.7	1.2	5.9	.2	5.7
Public.....	2.0	.5	.2	2.7	.6	3.3	.1	3.2
Nonpublic.....	1.4	.5	.1	2.0	.6	2.6	.1	2.5
1959-60:								
Total.....	3.7	1.2	.4	5.3	1.2	6.5	.3	6.2
Public.....	2.2	.6	.2	3.0	.6	3.6	.2	3.4
Nonpublic.....	1.5	.6	.2	2.3	.6	2.9	.1	2.8
1960-61: ⁵								
Total.....	4.1	1.4	.4	5.9	1.4	7.3	.3	7.0
Public.....	2.4	.7	.2	3.3	.7	4.0	.2	3.8
Nonpublic.....	1.7	.7	.2	2.6	.7	3.3	.1	3.2
1961-62:								
Total.....	4.4	1.6	.5	6.5	1.6	8.1	.3	7.8
Public.....	2.6	.8	.3	3.7	.8	4.5	.2	4.3
Nonpublic.....	1.8	.8	.2	2.8	.8	3.6	.1	3.5
1962-63: ⁵								
Total.....	4.9	1.9	.5	7.3	1.8	9.1	.5	8.6
Public.....	2.9	.9	.3	4.1	.9	5.0	.3	4.7
Nonpublic.....	2.0	1.0	.2	3.2	.9	4.1	.2	3.9
1963-64:								
Total.....	5.5	2.2	.5	8.2	1.9	10.1	.5	9.6
Public.....	3.3	1.0	.3	4.6	1.0	5.6	.3	5.3
Nonpublic.....	2.2	1.2	.2	3.6	.9	4.5	.2	4.3
1964-65: ⁵								
Total.....	6.2	2.4	.6	9.2	2.2	11.4	.6	10.8
Public.....	3.7	1.1	.4	5.2	1.2	6.4	.4	6.0
Nonpublic.....	2.5	1.3	.2	4.0	1.0	5.0	.2	4.8
1965-66: ⁵								
Total.....	7.2	2.6	.7	10.5	2.6	13.1	.6	12.5
Public.....	4.4	1.2	.4	6.0	1.4	7.4	.4	7.0
Nonpublic.....	2.8	1.4	.3	4.5	1.2	5.7	.2	5.5
1966-67: ⁵								
Total.....	8.0	2.8	.8	11.6	2.8	14.4	.6	13.8
Public.....	4.9	1.3	.5	6.7	1.5	8.2	.4	7.8
Nonpublic.....	3.1	1.5	.3	4.9	1.3	6.2	.2	6.0
1967-68: ⁵								
Total.....	8.8	3.1	.8	12.7	3.2	15.9	.6	15.3
Public.....	5.5	1.4	.5	7.4	1.8	9.2	.4	8.8
Nonpublic.....	3.3	1.7	.3	5.3	1.4	6.7	.2	6.5

See footnotes on page 91.

TABLE 45.—Expenditures from current funds and total current expenditures (1967-68 dollars) by institutions of higher education: United States, 1957-58 to 1977-78—Continued

Year and control	Expenditure for educational and general purposes				Expenditure for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Student education ¹	Organized research	Related activities ²	Total				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PROJECTED ⁷								
1968-69:								
Total.....	\$9.6	\$3.3	\$0.9	\$13.8	\$3.4	\$17.2	\$0.6	\$16.6
Public.....	6.0	1.5	.6	8.1	1.9	10.0	.4	9.6
Nonpublic.....	3.6	1.8	.3	5.7	1.5	7.2	.2	7.0
1969-70:								
Total.....	9.9	3.5	.9	14.3	3.7	18.0	.5	17.5
Public.....	6.2	1.6	.6	8.4	2.1	10.5	.4	10.1
Nonpublic.....	3.7	1.9	.3	5.9	1.6	7.5	.1	7.4
1970-71:								
Total.....	10.5	3.7	1.0	15.2	3.8	19.0	.5	18.5
Public.....	6.6	1.7	.6	8.9	2.2	11.1	.4	10.7
Nonpublic.....	3.9	2.0	.4	6.3	1.6	7.9	.1	7.8
1971-72:								
Total.....	11.1	4.0	1.1	16.2	4.0	20.2	.4	19.8
Public.....	7.0	1.8	.7	9.5	2.3	11.8	.3	11.5
Nonpublic.....	4.1	2.2	.4	6.7	1.7	8.4	.1	8.3
1972-73:								
Total.....	11.9	4.2	1.2	17.3	4.3	21.6	.4	21.2
Public.....	7.5	1.9	.8	10.2	2.5	12.7	.3	12.4
Nonpublic.....	4.4	2.3	.4	7.1	1.8	8.9	.1	8.8
1973-74:								
Total.....	12.8	4.4	1.2	18.4	4.7	23.1	.5	22.6
Public.....	8.1	2.0	.8	10.9	2.7	13.6	.4	13.2
Nonpublic.....	4.7	2.4	.4	7.5	2.0	9.5	.1	9.4
1974-75:								
Total.....	13.4	4.6	1.4	19.4	5.0	24.4	.5	23.9
Public.....	8.5	2.1	.9	11.5	2.9	14.4	.4	14.0
Nonpublic.....	4.9	2.5	.5	7.9	2.1	10.0	.1	9.9
1975-76:								
Total.....	14.3	4.8	1.4	20.5	5.3	25.8	.5	25.3
Public.....	9.1	2.2	.9	12.2	3.1	15.3	.4	14.9
Nonpublic.....	5.2	2.6	.5	8.3	2.2	10.5	.1	10.4
1976-77:								
Total.....	15.0	5.0	1.5	21.5	5.6	27.1	.5	26.6
Public.....	9.6	2.2	1.0	12.8	3.3	16.1	.4	15.7
Nonpublic.....	5.4	2.8	.5	8.7	2.3	11.0	.1	10.9
1977-78:								
Total.....	15.7	5.2	1.5	22.4	5.9	28.3	.5	27.8
Public.....	10.1	2.3	1.0	13.4	3.5	16.9	.4	16.5
Nonpublic.....	5.6	2.9	.5	9.0	2.4	11.4	.1	11.3

See footnotes on Page 91.

TABLE 45.—Continued

¹ Includes general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance of the physical plant.

² Includes expenditures for such items as laboratory schools, medical school hospitals, dental clinics, home economics cafeterias, agricultural college creameries, college-operated industrial plants connected with instructional programs but not actually integral parts of it, etc.

³ Auxiliary enterprises include student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, etc.

Student aid consists of scholarships, fellowships, and prizes and includes remission of fees.

⁴ Current-fund expenditures less capital outlay from current funds.

⁵ Interpolated.

⁶ Estimated.

⁷ The projection of expenditures from current funds is based on assumption that: (1) Expenditure per student and the percent of college-age persons attending college, on which expenditures for student education depend, will continue to increase as they did during the years 1957-58 to 1967-68;

(2) expenditures for organized research will follow the 1957-58 to 1967-68 trend; (3) the relationship to student education of expenditures for related activities, for auxiliary enterprises, and for student aid will each continue the 1957-58 to 1967-68 trend; and (4) the 1967-68 to 1977-78 expenditures from current funds for capital outlay will approximate 16 percent of total capital outlay.

For further methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Expenditure data from U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Higher Education, Biennial Survey of Education in the United States, chapter 4," 1957-58; (2) "Financial Statistics of Higher Education," 1959-60; (3) "Higher Education Finances," 1961-62 and 1963-64; and (4) unpublished data in the Office of Education.

Conversion to 1967-68 dollars was based on the Consumer Price Index published by the Bureau of Labor Statistics, U.S. Department of Labor and (for capital outlay) on the American Appraisal Company Construction Cost Index. For method of converting the indexes, see appendix table P.

TABLE 46.—Expenditures from current funds and total current expenditures (current dollars) by institutions of higher education: United States, 1957-58 to 1969-70

[Amounts in billions of current dollars]

Year and control	Expenditure for educational and general purposes				Expenditure for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Student education ¹	Organized research	Related activities ²	Total				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1957-58:								
Total.....	\$2.6	\$0.7	\$0.3	\$3.6	\$0.8	\$4.4	\$0.2	\$4.2
Public.....	1.5	.4	.2	2.1	.4	2.5	.1	2.4
Nonpublic.....	1.1	.3	.1	1.5	.4	1.9	.1	1.8
1958-59: ⁵								
Total.....	2.9	.9	.3	4.1	1.0	5.1	.2	4.9
Public.....	1.7	.5	.2	2.4	.5	2.9	.1	2.8
Nonpublic.....	1.2	.4	.1	1.7	.5	2.2	.1	2.1
1959-60:								
Total.....	3.2	1.0	.3	4.5	1.1	5.6	.2	5.4
Public.....	1.9	.5	.2	2.6	.5	3.1	.1	3.0
Nonpublic.....	1.3	.5	.1	1.9	.6	2.5	.1	2.4
1960-61: ⁵								
Total.....	3.6	1.2	.3	5.1	1.2	6.3	.3	6.0
Public.....	2.1	.6	.2	2.9	.6	3.5	.2	3.3
Nonpublic.....	1.5	.6	.1	2.2	.6	2.8	.1	2.7
1961-62:								
Total.....	3.9	1.5	.3	5.7	1.4	7.1	.3	6.8
Public.....	2.3	.7	.2	3.2	.7	3.9	.2	3.7
Nonpublic.....	1.6	.8	.1	2.5	.7	3.2	.1	3.1
1962-63: ⁵								
Total.....	4.4	1.7	.5	6.6	1.6	8.2	.4	7.8
Public.....	2.6	.8	.3	3.7	.8	4.5	.2	4.3
Nonpublic.....	1.8	.9	.2	2.9	.8	3.7	.2	3.5

See footnotes at end of table.

TABLE 46.—Expenditures from current funds and total current expenditures (current dollars) by institutions of higher education: United States, 1957-58 to 1969-70—Continued

Year and control	Expenditure for educational and general purposes				Expenditure for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Student education ¹	Organized research	Related activities ²	Total				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1963-64:								
Total.....	5.0	1.9	.5	7.4	1.8	9.2	.4	8.8
Public.....	3.0	.9	.3	4.2	.9	5.1	.2	4.9
Nonpublic.....	2.0	1.0	.2	3.2	.9	4.1	.2	3.9
1964-65: ⁶								
Total.....	5.7	2.2	.6	8.5	2.0	10.5	.5	10.0
Public.....	3.4	1.0	.4	4.8	1.0	5.8	.3	5.5
Nonpublic.....	2.3	1.2	.2	3.7	1.0	4.7	.2	4.5
1965-66: ⁶								
Total.....	6.8	2.5	.6	9.9	2.4	12.3	.6	11.7
Public.....	4.1	1.2	.4	5.7	1.3	7.0	.4	6.6
Nonpublic.....	2.7	1.3	.2	4.2	1.1	5.3	.2	5.1
1966-67: ⁶								
Total.....	7.7	2.8	.8	11.3	2.8	14.1	.6	13.5
Public.....	4.7	1.3	.5	6.5	1.5	8.0	.4	7.6
Nonpublic.....	3.0	1.5	.3	4.8	1.3	6.1	.2	5.9
1967-68: ⁶								
Total.....	8.8	3.1	.8	12.7	3.2	15.9	.6	15.3
Public.....	5.5	1.4	.5	7.4	1.8	9.2	.4	8.8
Nonpublic.....	3.3	1.7	.3	5.3	1.4	6.7	.2	6.5
PROJECTED ⁷								
1968-69:								
Total.....	9.8	3.3	0.9	14.0	3.6	17.6	0.6	17.0
Public.....	6.1	1.5	.6	8.2	2.0	10.2	.4	9.8
Nonpublic.....	3.7	1.8	.3	5.8	1.6	7.4	.2	7.2
1969-70:								
Total.....	10.4	3.7	1.1	15.2	3.7	18.9	.5	18.4
Public.....	6.5	1.7	.7	8.9	2.1	11.0	.4	10.6
Nonpublic.....	3.9	2.0	.4	6.3	1.6	7.9	.1	7.8

¹ Includes general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance of the physical plant.

² Includes expenditures for such items as laboratory schools, medical school hospitals, dental clinics, home economics cafeterias, agricultural college creameries, college-operated industrial plants connected with instructional programs but not actually integral parts of it, etc.

³ Auxiliary enterprises include student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, etc.

Student aid consists of scholarships, fellowships, and prizes and includes remission of fees.

⁴ Current-fund expenditures less capital outlay from current funds.

⁵ Interpolated.

⁶ Estimated.

⁷ Projected by applying the 1964-65 to 1967-68 trend in the Consumer Price Index to the projected expenditures of current funds in constant dollars (table 45).

For further methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Expenditure data from U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Higher Education, Biennial Survey of Education in the United States, chapter 4," 1957-58; (2) "Financial Statistics of Higher Education," 1959-60; (3) "Higher Education Finances," 1961-62 and 1963-64; and (4) unpublished data in the Office of Education.

TABLE 47.—Capital outlay of institutions of higher education: United States, 1957-58 to 1977-78

Year	Total		Public		Nonpublic	
	Billions of current dollars	Billions of 1967-68 dollars	Billions of current dollars	Billions of 1967-68 dollars	Billions of current dollars	Billions of 1967-68 dollars
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1957-58.....	\$1. 161	\$1. 610	\$0. 732	\$1. 015	\$0. 429	\$0. 595
1958-59 ¹	1. 304	1. 754	. 721	. 970	. 583	. 784
1959-60.....	1. 354	1. 768	. 807	1. 054	. 547	. 714
1960-61 ¹	1. 737	2. 216	. 932	1. 189	. 805	1. 027
1961-62.....	1. 714	2. 137	1. 010	1. 259	. 704	. 878
1962-63 ¹	2. 534	3. 074	1. 596	1. 936	. 938	1. 138
1958-59 to 1961-62...	8. 643	10. 949	5. 066	6. 408	3. 577	4. 541
1963-64.....	2. 466	2. 906	1. 518	1. 789	. 948	1. 117
1964-65 ²	3. 089	3. 549	2. 064	2. 371	1. 025	1. 178
1965-66 ²	3. 323	3. 687	2. 233	2. 478	1. 090	1. 209
1966-67 ²	3. 293	3. 462	2. 279	2. 396	1. 014	1. 066
1967-68 ²	3. 462	3. 462	2. 396	2. 396	1. 066	1. 066
1963-64 to 1967-68...	15. 633	17. 066	10. 490	11. 430	5. 143	5. 636
PROJECTED ³						
1968-69.....	3. 409	3. 268	2. 413	2. 313	0. 996	0. 955
1969-70.....	3. 191	2. 935	2. 326	2. 139	. 865	. 796
1970-71.....		2. 838		2. 106		. 732
1971-72.....		2. 731		1. 999		. 732
1972-73.....		2. 658		1. 974		. 684
1968-69 to 1972-73.....		14. 430		10. 531		3. 899
1973-74.....		2. 879		2. 115		. 764
1974-75.....		2. 903		2. 139		. 764
1975-76.....		2. 831		2. 115		. 716
1976-77.....		2. 637		2. 016		. 621
1977-78.....		2. 490		1. 933		. 557
1973-74 to 1977-78.....		13. 740		10. 318		3. 422

¹ Interpolated.² Estimated.

³ The projection of capital outlay is based on assumption that: (1) capital outlay per additional full-time equivalent of total opening fall enrollment will follow the 1957-58 to 1967-68 trend insofar as capital outlay resulting in increased value of plant is concerned; (2) capital outlay for replacement and rehabilitation will remain constant at the level of 1% of value of plant each year through 1977-78; and (3) since capital outlay relates to increased numbers of students over a number of years rather than annually, a moving average would more reasonably reflect annual capital outlay.

For further methodological details, see appendix table D.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Capital outlay data from U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Higher Education, Biennial Survey of Education in the United States, chapter 4," 1957-58; "Financial Statistics of Higher Education," 1959-60; (3) "Higher Education Finances," 1961-62 and 1963-64; and (4) unpublished data in the Office of Education.

Chapter V.—Student Charges by Institutions of Higher Education

C. George Lind

Definition and limitations

Estimated average student charges are based on the charges reported by institutions of higher education for the years 1961-62 through 1964-65 and 1966-67, weighted by the number of full-time students attending the institutions. The charges were those to a typical undergraduate full-time resident student. Since reports on student attendance during the base years did not identify the full-time students as undergraduates, graduates, or nonresidents, the weighting factor assumes that graduates and nonresidents are charged the undergraduate and resident tuition and fees.

Estimated average charges per student (entire academic year) (tables 48 and 49)

The estimated average student charges (tuition and required fees, board, and room) by publicly controlled institutions of higher education, in 1967-68 constant dollars, increased from \$916 in 1957-58 to \$1,076 in 1967-68 and are expected to reach \$1,246 by 1977-78 (table 48). Estimated average student charges by nonpublicly controlled institutions of higher education were \$1,620 in 1957-58, \$2,259 in 1967-68, and are expected to reach \$2,922 by 1977-78.

Tuition and required fees are largely responsible for the increases in student charges. Tuition and fees charged by public institutions rose from \$217 in 1957-58 to \$292 in 1967-68 and are expected to reach \$367 by 1977-78. Nonpublic institutions charged an estimated average tuition and fee of \$814 in 1957-58, \$1,327 in 1967-68, and a projected \$1,855 by 1977-78. Required fees are those for matriculation, laboratory, library, health, etc., but do not include books. Charges for tuition and required fees vary to a considerable extent by control and type of institution. Two factors bear upon the variation: (1) Income of public institutions from government sources; and (2) the varying cost of educating a student in different types of institutions.

The charges for board, while increasing slightly during the base period (table 49), when adjusted to constant 1967-68 dollars (table 48) had declined slightly in all but public universities and nonpublic 2-year institutions. The declines are not projected and, in effect, the assumption is made that the many large institutions which had held their board charges unchanged, in current unadjusted dollars, would not be able to continue that practice during the next decade.

Nonpublic institutions generally charge more than public institutions for dormitory rooms and universities generally charge more than other types of institutions for dormitory rooms. However, the rate of the increases in charges for dormitory rooms are not markedly dissimilar by either control or type of institution and the variations in the charges may be ascribed to the level of accommodation afforded.

TABLE 43.—Estimated average charges (1967-68 dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1957-58 to 1977-78
[Charges are for the academic year and in constant 1967-68 dollars]

(1)	Total tuition, board, and room			Tuition and required fees			Board (7-day basis)			Dormitory rooms		
	All	University	Other 6-year	All	University	Other 6-year	All	University	Other 6-year	All	University	Other 6-year
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1957-58: 1												
Public.....	9,016	9,009	9,705	9,420	9,217	9,244	8,155	9,479	9,454	9,453	9,403	9,220
Nonpublic....	1,620	1,810	1,565	1,046	814	950	728	534	565	535	457	272
1958-59: 1												
Public.....	9,332	9,094	9,272	6,209	2,234	2,508	1,408	4,779	4,655	4,653	4,033	2,229
Nonpublic....	1,687	1,890	1,573	1,123	867	1,012	783	534	565	535	464	286
1959-60: 1												
Public.....	9,510	1,020	9,445	6,512	2,322	2,772	1,611	4,779	4,657	4,653	4,033	2,359
Nonpublic....	1,712	1,970	1,640	1,300	919	1,074	836	534	565	535	470	299
1960-61: 1												
Public.....	9,666	1,046	9,609	6,665	2,389	2,865	1,633	4,779	4,656	4,653	4,033	2,469
Nonpublic....	1,819	2,050	1,706	1,376	972	1,136	853	534	565	535	477	313
1961-62: 1												
Public.....	9,864	1,072	9,802	6,776	2,447	3,000	1,650	4,779	4,656	4,653	4,033	2,559
Nonpublic....	1,835	2,120	1,776	1,406	1,025	1,196	848	534	565	535	483	326
1962-63: 1												
Public.....	1,007	1,100	941	639	243	300	215	406	340	341	304	273
Nonpublic....	1,929	2,264	1,999	1,421	1,066	1,205	972	534	567	547	477	341
1963-64: 1												
Public.....	1,021	1,131	953	655	250	310	227	406	340	340	309	283
Nonpublic....	2,004	2,321	2,073	1,443	1,105	1,241	1,001	537	569	548	471	340
1964-65: 1												
Public.....	1,035	1,144	966	666	260	316	234	410	340	340	312	286
Nonpublic....	2,076	2,390	2,100	1,466	1,126	1,261	1,016	537	569	548	471	340
1965-66: 1												
Public.....	1,049	1,176	981	714	274	346	246	410	340	340	317	287
Nonpublic....	2,116	2,437	2,131	1,489	1,149	1,286	1,027	537	569	548	471	340

See footnotes at end of table.

TABLE 4B.—Estimated average charges (1967-68 dollars) per full-time undergraduate resident degree-seeking student in institutions of higher education, by institutional type and control: United States, 1967-68 to 1977-78—Continued

Year and control	Total tuition, board, and room				Tuition and required fees				Board (7-day basis)				Dormitory room			
	All	University	Other 4-year	3-year	All	University	Other 4-year	3-year	All	University	Other 4-year	3-year	All	University	Other 4-year	3-year
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1968-69:																
Public.....	1,060	1,210	979	734	284	372	268	125	472	506	431	389	304	332	280	220
Nonpublic....	2,105	2,539	2,074	1,735	1,274	1,505	1,201	873	523	566	506	503	398	467	367	359
1969-70:																
Public.....	1,076	1,236	997	744	292	386	281	129	470	508	425	385	314	342	291	229
Nonpublic....	2,359	2,817	2,139	1,812	1,327	1,567	1,256	924	521	565	503	509	411	485	390	379
1970-71:																
Public.....	1,092	1,262	1,020	757	309	400	293	133	470	509	425	386	323	353	302	238
Nonpublic....	2,326	2,697	2,207	1,891	1,380	1,629	1,311	977	521	565	503	516	425	503	393	398
1971-72:																
Public.....	1,110	1,288	1,043	770	307	414	306	137	470	511	425	386	333	363	312	247
Nonpublic....	2,391	2,777	2,274	1,968	1,432	1,691	1,366	1,028	521	565	503	522	438	521	405	418
1972-73:																
Public.....	1,126	1,313	1,067	783	314	428	319	141	470	512	425	386	342	373	323	256
Nonpublic....	2,458	2,857	2,341	2,047	1,485	1,753	1,420	1,080	521	565	503	529	452	539	418	438
1973-74:																
Public.....	1,144	1,340	1,090	795	322	442	331	145	470	514	425	386	352	384	334	264
Nonpublic....	2,524	2,936	2,409	2,125	1,538	1,815	1,475	1,132	521	565	503	535	465	556	431	458
1974-75:																
Public.....	1,160	1,366	1,114	808	329	456	344	149	470	516	425	386	361	394	345	273
Nonpublic....	2,591	3,016	2,477	2,202	1,591	1,877	1,530	1,184	521	565	503	541	479	574	444	477
1975-76:																
Public.....	1,178	1,391	1,137	821	337	470	357	153	470	517	425	386	371	404	355	282
Nonpublic....	2,656	3,095	2,545	2,281	1,643	1,938	1,585	1,236	521	565	503	548	492	592	457	497

PROJECTED :

TABLE 49.—Estimated average charges (current dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1957-58 to 1969-70

[Charges are for the academic year and in current unadjusted dollars]

Year and enrolment	Total tuition, board, and room			Tuition and required fees			Board (7-day basis)			Dormitory rooms						
	All	University	Other 4-year	All	University	Other 4-year	All	University	Other 4-year	All	University	Other 4-year				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1957-58: 1																
Public.....	\$769	\$814	\$670	\$526	\$182	\$205	\$130	\$71	\$402	\$407	\$389	\$338	\$185	\$202	\$151	\$117
Nonpublic....	1,361	1,520	1,264	877	684	798	611	337	449	475	441	384	228	247	212	156
1958-59: 1																
Public.....	794	847	700	544	191	220	143	75	408	413	394	343	195	214	163	126
Nonpublic....	1,437	1,610	1,340	956	738	862	667	386	455	482	447	395	244	266	226	175
1959-60: 1																
Public.....	820	881	730	563	200	235	156	79	414	421	400	348	206	225	174	136
Nonpublic....	1,513	1,701	1,416	1,036	794	927	724	435	461	489	453	406	258	285	239	195
1960-61: 1																
Public.....	845	915	759	582	209	250	169	84	419	427	405	353	217	238	185	145
Nonpublic....	1,591	1,793	1,494	1,117	850	994	781	483	467	495	459	417	274	304	254	214
1961-62: 1																
Public.....	869	947	788	599	218	265	182	88	423	433	409	356	228	249	197	155
Nonpublic....	1,666	1,882	1,570	1,198	906	1,059	838	537	472	500	464	427	288	323	268	234
1962-63: 1																
Public.....	901	986	814	615	222	268	192	97	435	456	403	361	244	262	219	157
Nonpublic....	1,724	2,022	1,608	1,271	944	1,149	869	600	475	507	462	427	305	366	277	244
1963-64: 1																
Public.....	926	1,026	846	630	234	281	215	97	435	468	399	361	257	277	232	172
Nonpublic....	1,815	2,105	1,700	1,313	1,012	1,216	935	642	487	516	475	427	316	373	290	244
1964-65: 1																
Public.....	950	1,051	867	638	243	298	224	99	436	462	402	361	271	291	241	178
Nonpublic....	1,907	2,202	1,810	1,455	1,088	1,297	1,023	702	488	515	479	464	331	390	308	289

1965-66: ¹																
Public.....	982	1, 104	901	670	257	327	240	109	444	473	407	367	281	304	254	194
Nonpublic---	2, 004	2, 315	1, 896	1, 557	1, 153	1, 368	1, 086	768	495	528	481	473	356	419	329	316
1966-67:																
Public.....	1, 026	1, 171	947	710	275	360	259	121	457	490	417	376	294	321	271	213
Nonpublic---	2, 124	2, 456	2, 007	1, 679	1, 233	1, 456	1, 162	845	506	548	490	487	385	452	355	347
1967-68: ¹																
Public.....	1, 076	1, 236	997	744	292	386	281	129	470	508	425	386	314	342	291	229
Nonpublic---	2, 259	2, 617	2, 139	1, 812	1, 327	1, 567	1, 256	924	521	565	503	509	411	485	380	379

PROJECTED

1968-69: ¹																
Public.....	1, 122	1, 297	1, 048	777	307	411	301	137	483	523	437	396	332	363	310	244
Nonpublic....	2, 389	2, 770	2, 267	1, 942	1, 417	1, 673	1, 346	1, 003	535	580	517	530	437	517	404	409
1969-70: ¹																
Public.....	1, 170	1, 358	1, 100	811	324	436	323	144	495	539	448	407	351	383	329	260
Nonpublic....	2, 521	2, 928	2, 397	2, 075	1, 510	1, 783	1, 440	1, 084	549	596	530	550	462	549	427	441

¹ Data for 1957-58 through 1960-61 and for 1967-68 through 1968-69 estimated by applying the Consumer

Price Index to the data in table 48. See constant dollar index table L.

² Interpolated.

For further methodological details, see appendix table D

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Higher Education Basic Student Charges" 1961-62 through 1964-65 and 1966-67; and (2) "Opening (Fall) Enrollment in Higher Education" 1961 through 1964 and 1966.

APPENDIX

General Methodology and Statistical Tables

The 1968 projections of educational data by the U.S. Office of Education are based on reports of regular day schools, both public and private, and of accredited institutions of higher education listed in the Education Directory of the Office of Education.¹ The projections include enrollments at all levels, high school graduates, degrees by level and field, teacher and faculty demand, and expenditures in elementary and secondary schools and in institutions of higher education. Of these, projections of the number of children attending independent nursery and kindergarten schools and the first three grades of public elementary and secondary schools, enrollments in higher education, high school graduates, and degrees by level, were based directly on population. The others, with the exception of enrollment in grades 3 through 12 of public elementary and secondary schools and of degrees by field, were based on enrollments. Enrollments in grades 3 through 12 of public elementary and secondary schools were based on grade retention rates. (Retention rates could not be used for projecting higher education enrollments because the data on these enrollments have not been collected by year of enrollment.) Degrees by field were based on the distribution of total degrees by field at each level over a 10-year period.

Population aged 18-21 years was used for projecting college enrollments. It is recognized that not all college enrollments fall in this age group; nevertheless, in the absence of data on age of college students, some fairly sensitive yet stable exposure measure had to be used. Since about two-thirds of all degree-credit enrollment is full time, it can be assumed that a like proportion of the students fit the population age group used. The population averaging 18 years of age was chosen for projecting both high school graduates and first-time college enrollment. This age group gave a smoother fit when correlated with these data than could be obtained with other age groups. For projecting kindergarten, first-grade, and second-grade enrollments, population aged 5, 6, and 7 years, respectively, was used.

The choice of timelag between first-year enrollments and bachelor's degrees, between bachelor's degrees and master's degrees, and between master's degrees and doctorates was also made on an empirical basis. The different series of data were plotted against time so that different timelags between the series could be compared. While the evidence for the timelags chosen was not uniformly conclusive, there was no evidence pointing to a different choice.

The timelags chosen were: Bachelor's degrees 4 years after first-time enrollment, master's degrees 2 years after bachelor's degrees, and doctorates 3 years after master's degrees. To avoid escalation in rates, the actual projection of degrees was based on population of the age, assuming the chosen timelag, which fitted the entrance of the student into college.

For making the projections, regression methods were used wherever a trend could be established. Where no consistent series was available or the data were too irregular to establish a trend, a constant based on the latest observation or an average of the last two or three observations was used. For some projections, such as graduate enrollments, enrollments in institutions of higher education by full-time and part-time attendance, and nondegree-credit enrollments, relationships had to be obtained from a different series of data and transferred to the opening fall higher education enrollment series. This series is current and has been reasonably consistent in the past, although lacking some detailed characteristics which are required by educators for decisionmaking.

For the trend, observations in the 10 most recent years were used and these were extrapolated for 10 years into the future. The 10-year timespan was considered better than a longer timespan because of the rapid change in economic and social conditions and the improvement in the available statistics in recent years.

Straight lines fitted by the least squares technique to the ratio (for example, of enrollment to population) as the dependent variable and time in years as the independent variable were used for projecting whenever possible. The rationale for using the straight line is that the long-range, true curve of relationship would be likely to yield a straight line over any portion covering only a 10-year span. An advantage in using straight lines is their additive property when the ratio bases are the

¹ Education Directory, 1966-67: Part 3, Higher Education. U.S. Department of Health, Education, and Welfare, Office of Education.

same. This simplifies projection of components (all complex data are usually projected by components and summed).

The fitted straight line often lies considerably above or below the last observed point, resulting in an unusual rise or drop from the last actual observation. To avoid this and give face validity to the projections, the line was used only to establish the last point and a new line was drawn through the last observed ratio and the end point on the curve. (In this case, the fitted equation is used only to establish the ratio at the end of the 10-year span.) When all of the component curves are adjusted in this manner, they are additive just as were the original curves. For this reason, when any curve in a group of components exhibited a serious difference with the last observation, all of the component curves were adjusted, even if differences were slight. An independent curve was adjusted only when the discrepancy was serious.

An exception to the use of the straight line for projecting trends was made for projecting grade retention rates in the public schools. Because retention rates rose rapidly in the last 10 years, a straight line equation would produce projected rates well above permissible limits of retention. To allow for leveling off and to keep within such limits, an asymptotic equation was used with limits at 100 percent, except at certain grade levels where transfer of students from nonpublic schools occurs in large numbers.

The tables that follow outline for each major area (enrollments, degrees, teachers, and expenditures) the equations and constants that were used, the standard error when appropriate, and adjustments, if they were used. Adjustments have been expressed in terms of the projection equation.

TABLE A.—*Methodology (ch. I)*

Item	Text table number	Projection method			
		Constant (percent)	Least squares equation (y =percent; t =year; 1957=1)	Trend Standard error	Other Adjusted equation ¹
Fall enrollment in independent public kinder- garten and nursery schools, ²	1				(³).
3 years old ⁴			$y' = 0.50 + 0.36t$	0.089	$y' = 0.53 + 0.35t$
4 years old ⁵			$y' = 6.49 + 1.06t$	0.30	$y' = 6.72 + 1.04t$
5 years old ⁶			$y' = 45.50 + 1.98t$	1.01	$y' = 46.37 + 1.91t$
6 years old ⁷			$y' = 2.48 + 0.20t$	0.87	$y' = 2.01 + 0.23t$
Fall enrollment in independent nonpublic kinder- garten and nursery schools, ³	1				(⁵).
3 years old ⁹			$y' = 2.80 + 0.53t$	0.087	$y' = 2.75 + 0.53t$
4 years old ¹⁰			$y' = 5.80 + 1.14t$	0.23	$y' = 5.84 + 1.13t$
5 years old ¹¹			$y' = 10.22 + 0.37t$	0.95	$y' = 9.76 + 0.40t$
6 years old ¹²			$y' = 0.537 - 0.62t$	0.147	$y' = 0.459 - 0.056t$
Fall enrollment in public day schools, ¹³	2				
Kindergarten ¹³			$y' = 44.89 + 1.12t$	0.94	$y' = 49.26 + 0.91t$
Grade 1 ¹⁴			$y' = 97.05 - 0.18t$	0.77	$y' = 96.35 - 0.14t$
Grade 2 ¹⁵			$y' = 89.714 + 0.043t$	0.462	$y' = 89.671 + 0.045t$
Grade 3 ¹⁶			$z' = \log(100 - y') = 0.232 - 0.013t$	0.078	
Grade 4 ¹⁷			$z' = \log(100 - y') = 0.174 - 0.017t$	0.072	
Grade 5 ¹⁸			$z' = \log(100 - y') = 0.144 - 0.053t$	0.301	
Grade 6 ¹⁹			$z' = \log(100 - y') = 0.382 - 0.854t$	0.296	
Grade 7 ²⁰					(²⁰).
Grade 8 ²¹			$z' = \log(100 - y') = 0.630 - 0.058t$	0.111	
Grade 9 ²²			$z' = \log(105 - y') = 0.681 - 0.080t$	0.277	
Grade 10 ²³			$z' = \log(100 - y') = 0.957 - 0.047t$	0.056	
Grade 11 ²⁴			$z' = \log(100 - y') = 1.112 - 0.024t$	0.035	
Grade 12 ²⁵			$z' = \log(100 - y') = 1.046 - 0.017t$	0.056	
Organizational level ²⁶	3		$y' = 49.75 + 1.08t$	1.25	

Fall enrollment in regular nonpublic day schools...	2, 3	(27).
Grades kindergarten to 8.....		(28).
Grades 9 to 12.....		
1st-time opening fall degree-credit enrollment in institutions of higher education. ²⁰	5-7	
Men, public 4-year institutions.....		0.56 $y' = 14.35 + 0.44t$
Women, public 4-year institutions.....		0.40 $y' = 9.12 + 0.66t$
Men, private 4-year institutions.....		0.38 $y' = 12.95 - 0.14t$
Women, private 4-year institutions.....		0.282 $y' = 8.710 + 0.046t$
Men, public 2-year institutions.....		0.62 $y' = 8.46 + 0.44t$
Women, public 2-year institutions.....		0.40 $y' = 4.88 + 0.38t$
Men, private 2-year institutions.....		0.078 $y' = 0.893 + 0.054t$
Women, private 2-year institutions.....		0.053 $y' = 1.066 + 0.031t$
Total opening fall degree-credit enrollment in institutions of higher education. ²⁰	8-10	
Men, public 4-year institutions.....		1.01 $y' = 19.40 + 0.77t$
Women, public 4-year institutions.....		0.50 $y' = 10.62 + 0.89t$
Men, private 4-year institutions.....		0.31 $y' = 18.36 - 0.11t$
Women, private 4-year institutions.....		0.20 $y' = 8.73 + 0.19t$
Men, public 2-year institutions.....		0.31 $y' = 4.73 + 0.34t$
Women, public 2-year institutions.....		0.21 $y' = 2.54 + 0.27t$
Men, private 2-year institutions.....		0.068 $y' = 0.477 + 0.036t$
Women, private 2-year institutions.....		0.036 $y' = 0.458 + 0.022t$
Graduate opening fall degree-credit enrollment, 4-year institutions. ²¹	11	
Men, public institutions.....		0.47 $y' = 9.12 + 0.46t$
Women, public institutions.....		0.23 $y' = 7.79 + 0.32t$
Men, private institutions.....		0.22 $y' = 12.09 + 0.23t$
Women, private institutions.....		0.17 $y' = 8.70 + 0.78t$
Full-time graduate opening fall degree-credit enrollment, 4-year institutions. ²²	12	
Men, public institutions.....		52.8
Women, public institutions.....		36.0
Men, private institutions.....		39.8
Women, private institutions.....		32.3

See footnotes at end of table.

TABLE A.—*Methodology (ch D)—Continued*

Item	Text table number	Constant (percent)	Projection method		
			Least squares equation ($y = \text{percent}; t = \text{year}; 1957 = 1$)	Trend Standard error	Adjusted equation ¹ Other
Full-time undergraduate opening fall degree-credit enrollment, 4-year institutions. ^a	14				
Men, public institutions.....		81.4			
Women, public institutions.....		77.7			
Men, private institutions.....		78.3			
Women, private institutions.....		78.0			
Full-time undergraduate opening fall degree-credit enrollment, 2-year institutions. ^a	10				
Men, public institutions.....		59.0			
Women, public institutions.....		50.5			
Men, private institutions.....		83.3			
Women, private institutions.....		84.9			
Total opening fall nondegree-credit enrollment. ^a	15				
Men, public 4-year institutions.....			$y' = 0.343 + 0.030t$	0.143	$y' = 0.679 + 0.014t$
Women, public 4-year institutions.....			$y' = -0.035 + 0.047t$	0.171	$y' = 0.424 + 0.025t$
Men, private 4-year institutions.....			$y' = 0.2534 - 0.0079t$	0.0371	$y' = 0.2906 - 0.0097t$
Women, private 4-year institutions.....			$y' = 0.0772 + 0.0047t$	0.0127	$y' = 0.0484 + 0.0061t$
Men, public 2-year institutions.....			$y' = 1.17 + 0.19t$	0.35	$y' = 1.62 + 0.17t$
Women, public 2-year institutions.....			$y' = 0.18 + 0.17t$	0.24	$y' = 0.75 + 0.15t$
Men, private 2-year institutions.....			$y' = 0.518 - 0.026t$	0.051	$y' = 0.524 - 0.026t$
Women, private 2-year institutions.....			$y' = 0.1704 + 0.0057t$	0.0216	$y' = 0.1535 + 0.0065t$
Full-time opening fall nondegree-credit enrollment. ^a	15	41.4			
Full-time equivalent of part-time opening fall degree-credit enrollment. ^a	16				
Public institutions.....		33.0			
Private institutions.....		33.0			

Full-time equivalent of part-time opening fall 16	
nondegree-credit enrollment. ¹³	
Public institutions.....	28.0
Private institutions.....	28.0

- ¹ Adjusted by relocating line through last observed point and 1977 point of fitted line.
- ² First observation is for 1964.
- ³ Total public kindergarten and nursery school enrollment less kindergarten enrollment in regular public day schools.
- ⁴ y -percent 3-year-olds enrolled in public kindergarten and nursery schools is of population aged 3 years.
- ⁵ y -percent 4-year-olds enrolled in public kindergarten and nursery schools is of population aged 4 years.
- ⁶ y -percent 5-year-olds enrolled in public kindergarten and nursery schools is of population aged 5 years.
- ⁷ y -percent 6-year-olds enrolled in public kindergarten and nursery schools is of population aged 6 years.
- ⁸ Total nonpublic kindergarten and nursery school enrollment less kindergarten enrollment in regular nonpublic day schools.
- ⁹ y -percent 3-year-olds enrolled in private kindergarten and nursery schools is of population aged 3 years.
- ¹⁰ y -percent 4-year-olds enrolled in private kindergarten and nursery schools is of population aged 4 years.
- ¹¹ y -percent 5-year-olds enrolled in private kindergarten and nursery schools is of population aged 5 years.
- ¹² y -percent 6-year-olds enrolled in private kindergarten and nursery schools is of population aged 6 years.
- ¹³ y -percent kindergarten enrollment is of population aged 5 years.
- ¹⁴ y -percent 1st grade enrollment is of population aged 6 years.
- ¹⁵ y -percent 2d grade enrollment is of population aged 7 years.
- ¹⁶ y -percent grade 3 is of grade 2 in preceding year with restriction that percent cannot exceed 100.
- ¹⁷ y -percent grade 4 is of grade 3 in preceding year with restriction that percent cannot exceed 100.
- ¹⁸ y -percent grade 5 is of grade 4 in preceding year with restriction that percent cannot exceed 100.
- ¹⁹ y -percent grade 6 is of grade 5 in preceding year with restriction that percent cannot exceed 100.
- ²⁰ Arbitrarily related to 103 in 1972. (Transfers from nonpublic schools are assumed to account for excess over 100.)
- ²¹ y -percent grade 8 is of grade 7 in preceding year with restriction that percent cannot exceed 100.
- ²² y -percent grade 9 is of grade 8 in preceding year with restriction that percent cannot exceed 100. (Transfers from nonpublic schools assumed to account for excess over 100.)
- ²³ y -percent grade 10 is of grade 9 in preceding year with restriction that percent cannot exceed 100.
- ²⁴ y -percent grade 11 is of grade 10 in preceding year with restriction that percent cannot exceed 100.
- ²⁵ y -percent grade 12 is of grade 11 in preceding year with restriction that percent cannot exceed 100.
- ²⁶ y -percent 7th and 8th grades organized as secondary are of total 7th and 8th grades.
- ²⁷ Approximations based on the assumption that the number of enrollments in grades kindergarten to 8 in nonpublic schools will continue to decrease to 1968, and then remain constant through 1977.
- ²⁸ Approximations based on the assumption that the number of enrollments in grades 9 to 12 in nonpublic schools will remain at the 1967 level through 1977.
- ²⁹ y -percent that 1st-time opening fall degree-credit enrollment is of population aged 18 at nearest birthday (projected separately by sex and by type and control of institution).
- ³⁰ y -percent opening fall degree-credit enrollment is of population aged 18 to 21 in completed years (projected separately by sex and by type and control of institution).
- ³¹ y -percent that resident graduate 1st-term degree-credit enrollment is of total resident plus extension, graduate plus undergraduate in 4-year institutions (projected separately by sex and control of institution). The extrapolated percents were applied to projected resident plus extension, graduate plus undergraduate opening fall degree-credit enrollment in 4-year institutions.
- ³² Constant-percent that full-time graduate 1st-term degree-credit enrollment was of total graduate 1st-term degree-credit enrollment in 1961-62, calculated separately for each category by type and control of institution and by sex. These percentages together with similar percentages for undergraduate enrollments were adjusted to agree with total enrollment by attendance status reported in opening fall enrollment surveys, annually, 1962 through 1967 and in the 1968 comprehensive enrollment survey.
- ³³ Method was same as for full-time graduate opening fall degree-credit enrollment, replacing graduate enrollment by undergraduate enrollment.
- ³⁴ Constant-percent that full-time opening fall degree-credit enrollment was of total opening fall degree-credit enrollment in 2-year institutions, calculated from unpublished preliminary data in 1966 comprehensive enrollment survey. These percentages together with similar percentages for nondegree-credit enrollment were adjusted to agree with total degree-credit and nondegree-credit enrollment in 2-year institutions by attendance status, sex of student, and control of institution, reported in the 1966 and 1967 opening fall enrollment surveys. The adjusted percentages for 1967 held constant to 1977 were applied to projected opening fall degree-credit enrollment in 2-year institutions in corresponding categories by sex of student and control of institution.
- ³⁵ y -percent that opening fall nondegree-credit enrollment is of population aged 18 to 21 years (projected separately for each category by sex and by type and control of institution).
- ³⁶ Constant-percent that full-time nondegree-credit enrollment was of total nondegree-credit enrollment from unpublished preliminary data in 1968 comprehensive enrollment survey. This percentage together with a similar percentage for degree-credit enrollment was adjusted to agree with total degree-credit and nondegree-credit enrollment in all institutions by attendance status, reported in the 1966 and 1967 opening fall enrollment surveys. The adjusted percentage for 1967, held constant to 1977, was applied to projected opening fall nondegree-credit enrollment in all institutions.
- ³⁷ Constant-percent that full-time equivalent of part-time degree-credit enrollment was of part-time degree-credit enrollment in the 1964 full-time equivalent enrollment and credit-hours survey (percent same in publicly and privately controlled institutions).
- ³⁸ Constant-percent full-time equivalent of part-time nondegree-credit enrollment was of part-time nondegree-credit enrollment in the 1964 full-time equivalent enrollment and credit-hours survey (percent same in publicly and privately controlled institutions).

TABLE B.—*Methodology (ch. II)*

Item	Test table number	Projection method		
		Constant (percent)	Least squares equation (0=year; 1967-68=1)	Standard error
High school graduates				
Public: ^a	17			
Men.....			$y' = 52.31 + 1.28t$	1.67
Women.....			$y' = 56.80 + 1.11t$	1.54
Nonpublic ^b		48.1		
Bachelor's and 1st-professional degrees conferred on men. ^a	18		$y' = 20.79 + 0.21t$	1.19
Selected fields ^c	20			
Mathematics and statistics.....			$y' = 2.03 + 0.30t$	.0038
Engineering.....			$y' = 14.50 - 0.34t$	.0093
Physical sciences.....			$y' = 5.311 - 0.050t$	.0023
Biological sciences.....			$y' = 4.53 + 0.11t$	.0031
Agriculture, forestry.....			$y' = 3.42 - 0.14t$	.0014
Health professions.....			(^c)	
Science, general program.....			$y' = 0.554 + 0.013t$	.00058
Fine arts.....			$y' = 4.244 - 0.016t$	.0011
Philosophy and religion.....			$y' = 2.290 - 0.018t$	.00078
English and journalism.....			$y' = 3.41 + 0.11t$	.0017
Foreign languages.....			$y' = 0.710 + 0.071t$	.00075
Psychology.....			$y' = 1.33 + 0.13t$	.0011
Social sciences.....			$y' = 13.45 + 0.51t$	.0068
Education.....			$y' = 7.869 - 0.097t$	.0030
Library science.....			$y' = 0.1888 - 0.0059t$	.00050
Social work.....			$y' = 0.3171 + 0.0042t$	.00090
Other.....			$y' = 28.93 - 0.30t$	.0026
Bachelor's and 1st-professional degrees conferred on women. ^b	18		$y' = 10.79 + 0.55t$	.31
Selected fields ^c				
Mathematics and statistics.....	20		$y' = 1.58 + 0.18t$	.0016
Engineering.....			$y' = 0.0842 - 0.0013t$	.00013
Physical sciences.....			$y' = 1.411 - 0.028t$	.00078
Biological sciences.....			$y' = 2.629 + 0.083t$	.00008
			$y' = 1.09 + 0.21t$	
			$y' = 0.06800 - 0.00033t$	
			$y' = 1.188 - 0.017t$	
			$y' = 2.669 + 0.081t$	

Mason's (occupational) degree conferred on			Mason's (occupational) degree conferred on		
non. ^a			non. ^a		
Subtotal table ^b			Subtotal table ^b		
Mathematics and statistics			Mathematics and statistics		
Engineering	23	$y' = 1.14 + 0.53y$	Engineering	23	$y' = 1.14 + 0.53y$
Physical sciences	60	$y' = 10.33 + 0.47y$	Physical sciences	60	$y' = 10.33 + 0.47y$
Biological sciences	34	$y' = 0.8359 + 0.0772y$	Biological sciences	34	$y' = 0.8359 + 0.0772y$
Agriculture, forestry	696	$y' = 3.2936 + 0.0032y$	Agriculture, forestry	696	$y' = 3.2936 + 0.0032y$
Health professions	13	$y' = 3.72 + 0.17y$	Health professions	13	$y' = 3.72 + 0.17y$
Sciences, general program	13	$y' = 2.171 + 0.0429y$	Sciences, general program	13	$y' = 2.171 + 0.0429y$
Fine arts	19	$y' = 0.39 + 0.11y$	Fine arts	19	$y' = 0.39 + 0.11y$
Philosophy and religion	10	$y' = 0.34 + 0.13y$	Philosophy and religion	10	$y' = 0.34 + 0.13y$
English and journalism	11	$y' = 1.363 + 0.0339y$	English and journalism	11	$y' = 1.363 + 0.0339y$
Foreign languages	674	$y' = 3.006 + 0.048y$	Foreign languages	674	$y' = 3.006 + 0.048y$
Psychology	11	$y' = 1.179 + 0.0815y$	Psychology	11	$y' = 1.179 + 0.0815y$
Social sciences	11	$y' = 1.813 + 0.0016y$	Social sciences	11	$y' = 1.813 + 0.0016y$
Education	36	$y' = 0.75 + 0.23y$	Education	36	$y' = 0.75 + 0.23y$
Library sciences	76	$y' = 33.17 + 0.034y$	Library sciences	76	$y' = 33.17 + 0.034y$
Social work	22	$y' = 1.013 + 0.0355y$	Social work	22	$y' = 1.013 + 0.0355y$
Other	20	$y' = 1.827 + 0.014y$	Other	20	$y' = 1.827 + 0.014y$
Total			Total		
1, 16			1, 16		

See footnote at end of table.

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Name	Type of source	Predictive method	
		Control equation	Estimated equation ¹
Linear control equation (1949-1950-1951)			
Number of groups	Number of groups	Number of groups	Number of groups
19	19	19	19
20	20	20	20
Statistical and statistical			
Engineering	Engineering	Engineering	Engineering
Physical sciences	Physical sciences	Physical sciences	Physical sciences
Biological sciences	Biological sciences	Biological sciences	Biological sciences
Agriculture, forestry	Agriculture, forestry	Agriculture, forestry	Agriculture, forestry
Health professions	Health professions	Health professions	Health professions
Business, general program	Business, general program	Business, general program	Business, general program
Other arts	Other arts	Other arts	Other arts
Mathematics and statistics	Mathematics and statistics	Mathematics and statistics	Mathematics and statistics
Engineering	Engineering	Engineering	Engineering
Physical sciences	Physical sciences	Physical sciences	Physical sciences
Biological sciences	Biological sciences	Biological sciences	Biological sciences
Agriculture, forestry	Agriculture, forestry	Agriculture, forestry	Agriculture, forestry
Health professions	Health professions	Health professions	Health professions
Business, general program	Business, general program	Business, general program	Business, general program
Other arts	Other arts	Other arts	Other arts
Mathematics and statistics	Mathematics and statistics	Mathematics and statistics	Mathematics and statistics
Engineering	Engineering	Engineering	Engineering
Physical sciences	Physical sciences	Physical sciences	Physical sciences
Biological sciences	Biological sciences	Biological sciences	Biological sciences
Agriculture, forestry	Agriculture, forestry	Agriculture, forestry	Agriculture, forestry
Health professions	Health professions	Health professions	Health professions
Business, general program	Business, general program	Business, general program	Business, general program
Other arts	Other arts	Other arts	Other arts
Mathematics and statistics	Mathematics and statistics	Mathematics and statistics	Mathematics and statistics
Engineering	Engineering	Engineering	Engineering
Physical sciences	Physical sciences	Physical sciences	Physical sciences
Biological sciences	Biological sciences	Biological sciences	Biological sciences
Agriculture, forestry	Agriculture, forestry	Agriculture, forestry	Agriculture, forestry
Health professions	Health professions	Health professions	Health professions
Business, general program	Business, general program	Business, general program	Business, general program
Other arts	Other arts	Other arts	Other arts

Philosophy and religion.....	$\chi^2 = 3.347 - 0.0039$	0.0021	$\chi^2 = 3.399 - 0.0029$
English and journalism.....	$\chi^2 = 3.714 - 0.0059$	0.0020	$\chi^2 = 3.340 - 0.0040$
Foreign languages.....	$\chi^2 = 3.003 - 0.0140$	0.0021	$\chi^2 = 3.391 - 0.0069$
Psychology.....	$\chi^2 = 3.303 - 0.0170$	0.0020	$\chi^2 = 3.637 - 0.0071$
Social sciences.....	$\chi^2 = 3.121 - 0.010$	0.0021	$\chi^2 = 3.774 - 0.0059$
Education.....	$\chi^2 = 3.400 - 0.015$	0.0021	$\chi^2 = 3.411 - 0.010$
Library sciences.....	$\chi^2 = 3.010 - 0.00000$	0.0021	$\chi^2 = 3.172 - 0.00759$
Medical work.....	$\chi^2 = 3.101 - 0.00000$	0.0020	$\chi^2 = 3.101 - 0.00000$
Other.....	$\chi^2 = 3.100 - 0.0000$	0.0020	$\chi^2 = 3.072 - 0.0020$
Student's degree conferred on women χ^2	$\chi^2 = 3.077 - 0.00075$	0.00	$\chi^2 = 3.170 - 0.00759$
Student body χ^2		0.0	
Education and religion.....	$\chi^2 = 3.205 - 0.015$	0.0020	$\chi^2 = 3.011 - 0.010$
Engineering.....	$\chi^2 = 3.003 - 0.0000$	0.0018	$\chi^2 = 3.107 - 0.0039$
Physical sciences.....	$\chi^2 = 3.114 - 0.0050$	0.0021	$\chi^2 = 3.361 - 0.0029$
Biological sciences.....	$\chi^2 = 3.144 - 0.0050$	0.0021	$\chi^2 = 3.470 - 0.0041$
Agriculture, forestry.....	$\chi^2 = 3.003 - 0.0000$	0.0021	$\chi^2 = 3.339 - 0.0029$
Health professions.....	$\chi^2 = 3.071 - 0.0075$	0.0021	$\chi^2 = 3.094 - 0.0050$
Business, general program.....	$\chi^2 = 3.000 - 0.0000$	0.0000	$\chi^2 = 3.000 - 0.0000$
Free arts.....	$\chi^2 = 3.071 - 0.0000$	0.0021	$\chi^2 = 3.072 - 0.0029$
Philosophy and religion.....	$\chi^2 = 3.000 - 0.0000$	0.0020	$\chi^2 = 3.011 - 0.0000$
English and journalism.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$
Foreign languages.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$
Psychology.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$
Social sciences.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$
Education.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$
Library sciences.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$
Medical work.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$
Other.....	$\chi^2 = 3.000 - 0.0000$	0.0021	$\chi^2 = 3.000 - 0.0000$

Student's degree conferred on women χ^2

Student body χ^2

Education and religion.....

Engineering.....

Physical sciences.....

Biological sciences.....

Agriculture, forestry.....

Health professions.....

Business, general program.....

Free arts.....

Philosophy and religion.....

English and journalism.....

Foreign languages.....

Psychology.....

Social sciences.....

Education.....

Library sciences.....

Medical work.....

Other.....

Student's degree conferred on women χ^2

Student body χ^2

Education and religion.....

Engineering.....

Physical sciences.....

Biological sciences.....

Agriculture, forestry.....

Health professions.....

Business, general program.....

Free arts.....

Philosophy and religion.....

English and journalism.....

Foreign languages.....

Psychology.....

Social sciences.....

Education.....

Library sciences.....

Medical work.....

Other.....

[illegible]

Public institutional staff ^a..... \$5.0

Publications equivalent institutional staff for 20.....

Publications equivalent of part-time ^a..... \$5.0

Publications equivalent of public institutional staff ^a..... \$5.0

Grand total-time and part-time professional on 9 20-24

in institutions of higher education.

Public 8-year institutions

Noninstitutional staff:

For medical degree-grants courses..... (b)

Public institutional staff ^a..... \$5.0

Public professional staff:

Administrative and services ^a..... \$5.0

Department research ^a..... \$5.0

Public 8-year institutions

Noninstitutional staff:

For medical degree-grants courses..... (b)

Public institutional staff ^a..... \$5.0

Public professional staff:

Administrative and services ^a..... \$5.0

Department research ^a..... \$5.0

Public 8-year institutions

Noninstitutional staff:

For medical degree-grants courses..... (b)

Public institutional staff ^a..... \$5.0

Public professional staff:

Administrative and services ^a..... \$5.0

Department research ^a..... \$5.0

Public 8-year institutions

Noninstitutional staff:

For medical degree-grants courses..... (b)

Public institutional staff ^a..... \$5.0

Public professional staff:

Administrative and services ^a..... \$5.0

Department research ^a..... \$5.0

Public 8-year institutions

Noninstitutional staff:

For medical degree-grants courses..... (b)

Public institutional staff ^a..... \$5.0

Public professional staff:

Administrative and services ^a..... \$5.0

Department research ^a..... \$5.0

Public 8-year institutions

Noninstitutional staff:

For medical degree-grants courses..... (b)

Public institutional staff ^a..... \$5.0

Public professional staff:

Administrative and services ^a..... \$5.0

Department research ^a..... \$5.0

Public 8-year institutions

Noninstitutional staff:

For medical degree-grants courses..... (b)

Public institutional staff ^a..... \$5.0

Public professional staff:

Administrative and services ^a..... \$5.0

Department research ^a..... \$5.0

Table C.—Biology (A, HFD)—Continued

Item	Total enrolled	Positions filled			Other
		Control	Least square regression (page 100, HFD-10)	Adjusted regression 1	
From estimated full-time equivalent professional staff employed in institutions of higher education	10				
Subtotal					
For national Negro study centers					(B)
From institutions and 4					
From professional staff					
From nonprofessional staff					
From research and service 5					
From research 6					
From estimated full-time equivalent nonprofessional staff in institutions of higher education	20				
From additional institutional staff					
For research 7					
For research 8					
From estimated full-time equivalent professional staff in institutions of higher education	30				
From additional professional staff					
For research 9					

Table B.—Methodology (ch. IV and ch. V)

In—	Total sample	Prediction method			Other
		Constant	Least squares regression (n=prob; total N=n)	Standard error		Adjusted equation
Expenditures for education by elementary and secondary day schools					
Expenditure expenditures					
Public					(1)
Nonpublic					(2)
Capital outlay					
Public					(3)
Nonpublic					(4)
Expenditure					(5)
Public					(6)
Nonpublic					(7)
Expenditures for education by institutions of higher education					
Expenditure expenditures					
Public					(8)
Nonpublic					(9)
Capital outlay					
Public					(10)
Nonpublic					(11)
Expenditures for education by public school systems					
Average daily attendance	45				(12)
Expenditure expenditures					(13)
Expenditure expenditures					(14)
Expenditure expenditures					(15)
Expenditure expenditures					(16)
Expenditure expenditures					(17)
Expenditure expenditures					(18)
Expenditure expenditures					(19)
Expenditure expenditures					(20)
Expenditure expenditures					(21)
Expenditure expenditures					(22)
Expenditure expenditures					(23)
Expenditure expenditures					(24)
Expenditure expenditures					(25)
Expenditure expenditures					(26)
Expenditure expenditures					(27)
Expenditure expenditures					(28)
Expenditure expenditures					(29)
Expenditure expenditures					(30)
Expenditure expenditures					(31)
Expenditure expenditures					(32)
Expenditure expenditures					(33)
Expenditure expenditures					(34)
Expenditure expenditures					(35)
Expenditure expenditures					(36)
Expenditure expenditures					(37)
Expenditure expenditures					(38)
Expenditure expenditures					(39)
Expenditure expenditures					(40)
Expenditure expenditures					(41)
Expenditure expenditures					(42)
Expenditure expenditures					(43)
Expenditure expenditures					(44)
Expenditure expenditures					(45)
Expenditure expenditures					(46)
Expenditure expenditures					(47)
Expenditure expenditures					(48)
Expenditure expenditures					(49)
Expenditure expenditures					(50)
Expenditure expenditures					(51)
Expenditure expenditures					(52)
Expenditure expenditures					(53)
Expenditure expenditures					(54)
Expenditure expenditures					(55)
Expenditure expenditures					(56)
Expenditure expenditures					(57)
Expenditure expenditures					(58)
Expenditure expenditures					(59)
Expenditure expenditures					(60)
Expenditure expenditures					(61)
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Expenditure expenditures					(64)
Expenditure expenditures					(65)
Expenditure expenditures					(66)
Expenditure expenditures					(67)
Expenditure expenditures					(68)
Expenditure expenditures					(69)
Expenditure expenditures					(70)
Expenditure expenditures					(71)
Expenditure expenditures					(72)
Expenditure expenditures					(73)
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Expenditure expenditures					(79)
Expenditure expenditures					(80)
Expenditure expenditures					(81)
Expenditure expenditures					(82)
Expenditure expenditures					(83)
Expenditure expenditures					(84)
Expenditure expenditures					(85)
Expenditure expenditures					(86)
Expenditure expenditures					(87)
Expenditure expenditures					(88)
Expenditure expenditures					(89)
Expenditure expenditures					(90)
Expenditure expenditures					(91)
Expenditure expenditures					(92)
Expenditure expenditures					(93)
Expenditure expenditures					(94)
Expenditure expenditures					(95)
Expenditure expenditures					(96)
Expenditure expenditures					(97)
Expenditure expenditures					(98)
Expenditure expenditures					(99)
Expenditure expenditures					(100)

	* \$100,000		* \$100,000
(Current expenditures for all programs including above of 1967 legislation)	\$ 100,000		
(Current expenditures for all programs excluding above of 1967 legislation)	\$ 100,000		
Expenditures for salaries of institutional staff in public elementary and secondary day schools.....			
Average annual salary.....	\$' = \$11,400 + 20(%) ^m	837, 41	\$' = \$11,393 + 210(%) ⁿ
Total salary.....			
(Expenditure of public elementary and secondary school teachers and regular salary).....			
Number employed.....	\$' = \$11,413 + 55(%) ^m	1, 613	\$' = 71,204 - 20(%) ⁿ
(Regular salary without pay?).....			
Total.....	\$ 100,000		
Pay item.....			
(Expenditure of public elementary and secondary school teachers and regular salary for hours for instruction).....			
Percentage of classroom.....			
For classroom work.....			
Elementary.....	\$ 27, 4		
Secondary.....	\$ 27, 5		
For current expenditure.....			
(Regular salary).....			
For classroom work.....			
For current expenditure.....			
Expenditure for hours by public elementary and secondary schools.....			
Expenditure for current funds and total current fund expenditures by institutions of higher education.....			

Estimated average savings per full-time 60-65

retirees, based on the following assumptions:
 - 10% of savings are used for retirement
 - 10% of savings are used for health care
 - 10% of savings are used for long-term care
 - 10% of savings are used for other retirement needs

Category	Assumption	Estimated savings per full-time retiree
Retirement	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
Health Care	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
Long-Term Care	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
Other Retirement Needs	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56
	10% of savings	\$1,234.56

Source: Author's calculations.

[illegible]

Figure 9 — Depth and temperature profiles, October 1967 to 1977

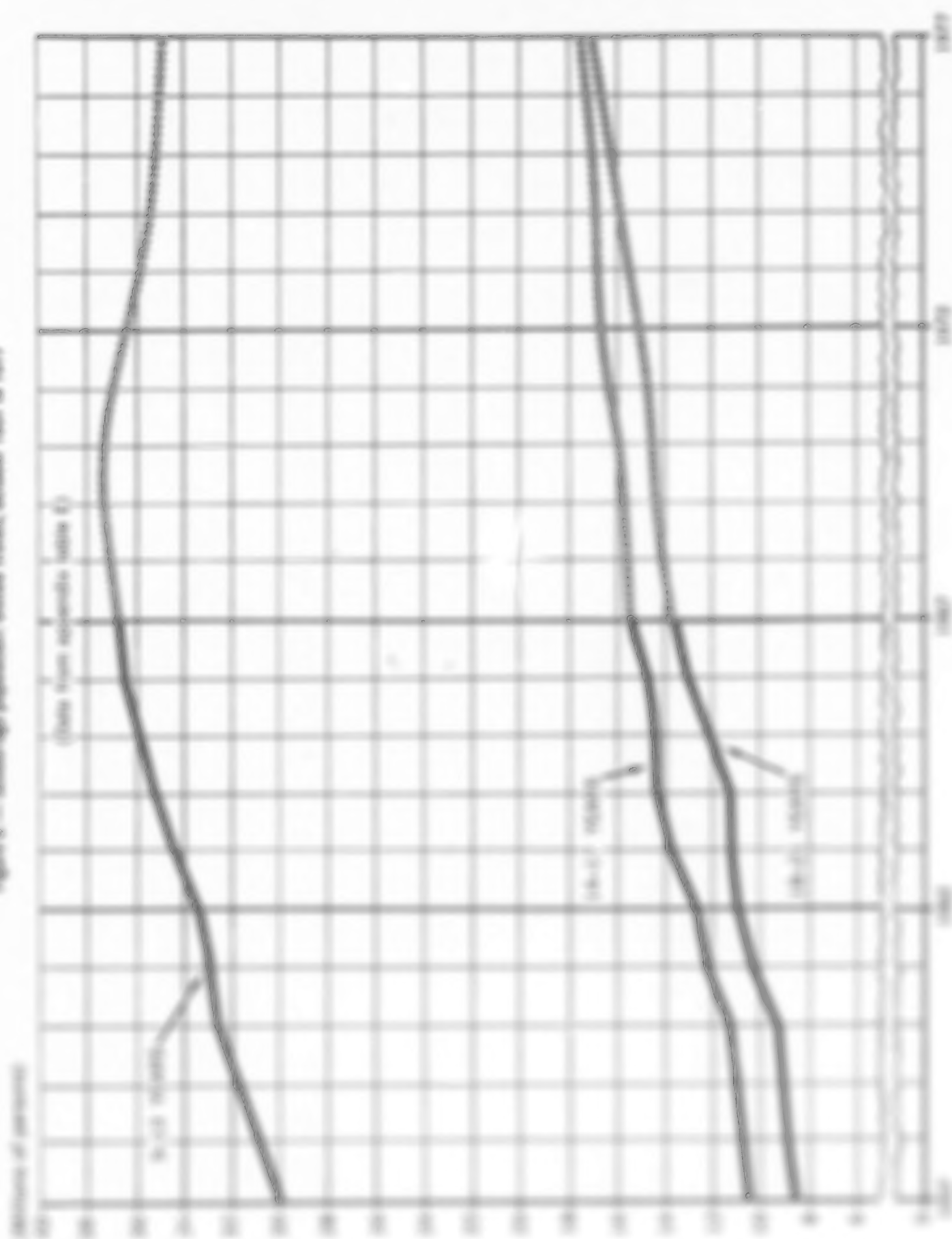


TABLE E.—School-age population: United States, 1957-85 ¹

Projection Series C

Year (fall)	Ages as of October 1 (in thousands)							
	5-13	14-17	17		18		18-21	
	Total	Total	Men	Women	Men	Women	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ESTIMATED								
1957.....	29,916	10,423	1,172	1,154	1,152	1,130	4,409	4,381
1958.....	30,932	10,867	1,240	1,218	1,180	1,158	4,508	4,471
1959.....	32,074	11,135	1,351	1,322	1,251	1,224	4,668	4,612
1960.....	33,064	11,411	1,462	1,428	1,360	1,329	4,897	4,827
1961.....	33,461	12,199	1,401	1,368	1,464	1,433	5,234	5,145
1962.....	34,111	12,951	1,406	1,370	1,404	1,372	5,480	5,377
1963.....	34,781	13,693	1,524	1,484	1,409	1,374	5,652	5,543
1964.....	35,446	14,215	1,869	1,812	1,526	1,488	5,817	5,702
1965.....	36,035	14,157	1,790	1,732	1,871	1,815	6,221	6,078
1966.....	36,619	14,371	1,786	1,732	1,793	1,737	6,612	6,447
1967.....	36,997	14,715	1,792	1,734	1,789	1,736	6,993	6,810
PROJECTED								
1968.....	37,224	15,135	1,843	1,785	1,794	1,739	7,259	7,062
1969.....	37,286	15,538	1,898	1,838	1,845	1,790	7,234	7,036
1970.....	37,108	15,882	1,959	1,903	1,900	1,842	7,341	7,140
1971.....	36,691	16,187	2,002	1,945	1,961	1,908	7,513	7,314
1972.....	36,246	16,427	2,048	1,983	2,004	1,949	7,722	7,524
1973.....	35,876	16,599	2,070	2,008	2,050	1,988	7,927	7,720
1974.....	35,563	16,754	2,114	2,052	2,072	2,013	8,098	7,890
1975.....	35,267	16,908	2,124	2,062	2,116	2,057	8,252	8,041
1976.....	35,158	16,957	2,130	2,071	2,126	2,066	8,375	8,158
1977.....	35,220	16,932	2,153	2,085	2,132	2,075	8,457	8,245
1978.....	35,479	16,789	2,200	2,118	2,154	2,089	8,540	8,321

¹ Office of Education estimates are based on published and unpublished Bureau of the Census population data by age as of July 1. Population data used are consistent with series C projection data in U.S. Department of Commerce, Bureau of the Census "Current Population Reports: Population Estimates, Summary of Demographic Projections," Series P-25, No. 388, Mar. 14, 1968. For definition of series C population projections, see footnotes to table H.

TABLE F.—School-age population: United States, 1957-85 ¹

Projection Series B

Year (fall)	Ages as of October 1 (in thousands)							
	5-13	14-17	17		18		18-21	
	Total	Total	Men	Women	Men	Women	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ESTIMATED								
1957.....	29,916	10,423	1,172	1,154	1,152	1,130	4,409	4,381
1958.....	30,932	10,867	1,240	1,218	1,180	1,158	4,508	4,471
1959.....	32,074	11,135	1,351	1,322	1,251	1,224	4,668	4,612
1960.....	33,064	11,411	1,462	1,428	1,360	1,329	4,897	4,827
1961.....	33,461	12,199	1,401	1,368	1,464	1,433	5,234	5,145
1962.....	34,111	12,951	1,406	1,370	1,404	1,372	5,480	5,377
1963.....	34,781	13,693	1,524	1,484	1,409	1,374	5,652	5,543
1964.....	35,446	14,215	1,869	1,812	1,526	1,488	5,817	5,702
1965.....	36,035	14,157	1,790	1,732	1,871	1,815	6,221	6,078
1966.....	36,619	14,371	1,786	1,732	1,793	1,737	6,612	6,447
1967.....	36,997	14,715	1,792	1,734	1,789	1,736	6,993	6,810
PROJECTED								
1968.....	37,224	15,135	1,843	1,785	1,794	1,739	7,259	7,062
1969.....	37,286	15,538	1,898	1,838	1,845	1,790	7,234	7,036
1970.....	37,108	15,882	1,959	1,903	1,900	1,842	7,341	7,140
1971.....	36,737	16,187	2,002	1,945	1,961	1,908	7,513	7,314
1972.....	36,499	16,427	2,048	1,983	2,004	1,949	7,722	7,524
1973.....	36,428	16,599	2,070	2,008	2,050	1,988	7,927	7,720
1974.....	36,502	16,754	2,114	2,052	2,072	2,013	8,098	7,890
1975.....	36,682	16,908	2,124	2,062	2,116	2,057	8,252	8,041
1976.....	37,127	16,957	2,130	2,071	2,126	2,066	8,375	8,158
1977.....	37,792	16,932	2,153	2,085	2,132	2,075	8,457	8,245
1978.....	38,689	16,789	2,200	2,118	2,154	2,089	8,540	8,321

¹ Office of Education estimates are based on published and unpublished Bureau of the Census population data by age as of July 1. Population data used are consistent with series B projection data in U.S. Department of Commerce, Bureau of the Census "Current Population Reports: Population Estimates, Summary of Demographic Projections," Series P-25, No. 388, Mar. 14, 1968. For definition of series B population projections, see footnotes to table H.

TABLE G.—School-age population: United States, 1957-85 ¹

Projection Series D

Year (fall)	Ages as of October 1 (in thousands)							
	5-13	14-17	17		18		18-21	
	Total	Total	Men	Women	Men	Women	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ESTIMATED								
1957.....	29,916	10,423	1,172	1,154	1,152	1,130	4,409	4,381
1958.....	30,932	10,867	1,240	1,218	1,180	1,158	4,508	4,471
1959.....	32,074	11,135	1,351	1,322	1,251	1,224	4,668	4,612
1960.....	33,064	11,411	1,462	1,428	1,360	1,329	4,897	4,827
1961.....	33,461	12,199	1,401	1,368	1,464	1,433	5,234	5,145
1962.....	34,111	12,951	1,406	1,370	1,404	1,372	5,480	5,377
1963.....	34,781	13,693	1,524	1,484	1,409	1,374	5,652	5,543
1964.....	35,446	14,215	1,869	1,812	1,526	1,488	5,817	5,702
1965.....	36,035	14,157	1,790	1,732	1,871	1,815	6,221	6,078
1966.....	36,619	14,371	1,786	1,732	1,793	1,737	6,612	6,447
1967.....	36,997	14,715	1,792	1,734	1,789	1,736	6,993	6,810
PROJECTED								
1968.....	37,224	15,135	1,843	1,785	1,794	1,739	7,259	7,062
1969.....	37,286	15,538	1,898	1,838	1,845	1,790	7,234	7,036
1970.....	37,108	15,882	1,959	1,903	1,900	1,842	7,341	7,140
1971.....	36,650	16,187	2,002	1,945	1,961	1,908	7,513	7,314
1972.....	36,036	16,427	2,048	1,983	2,004	1,949	7,722	7,524
1973.....	35,408	16,599	2,070	2,008	2,050	1,988	7,927	7,720
1974.....	34,754	16,754	2,114	2,052	2,072	2,013	8,098	7,890
1975.....	34,038	16,908	2,124	2,062	2,116	2,057	8,252	8,041
1976.....	33,432	16,957	2,130	2,071	2,126	2,066	8,375	8,158
1977.....	32,947	16,932	2,153	2,085	2,132	2,075	8,457	8,245
1978.....	32,616	16,789	2,200	2,118	2,154	2,089	8,540	8,321

¹ Office of Education estimates are based on published and unpublished Bureau of the Census population data by age as of July 1. Population data used are consistent with series D projection data in U.S. Department of Commerce, Bureau of the Census "Current Population Reports: Population Estimates, Summary of Demographic Projections," Series P-25, No. 388, Mar. 14, 1968. For definition of series D population projections, see footnotes to table H.

TABLE H.—The effect of Census fertility assumptions B, C, and D on projections of 5-, 6-, and 7-year-old population: United States, Oct. 1, 1968 to Sept. 30, 1985¹

[In thousands]									
Year (fall)	Age 5			Age 6			Age 7		
	B	C	D	B	C	D	B	C	D
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957.....	3,704	3,704	3,704	3,604	3,604	3,604	3,508	3,508	3,508
1958.....	3,802	3,802	3,802	3,694	3,694	3,694	3,632	3,632	3,632
1959.....	3,897	3,897	3,897	3,789	3,789	3,789	3,721	3,721	3,721
1960.....	3,964	3,964	3,964	3,887	3,887	3,887	3,811	3,811	3,811
1961.....	4,012	4,012	4,012	3,972	3,972	3,972	3,894	3,894	3,894
1962.....	4,100	4,100	4,100	4,020	4,020	4,020	3,979	3,979	3,979
1963.....	4,119	4,119	4,119	4,107	4,107	4,107	4,026	4,026	4,026
1964.....	4,132	4,132	4,132	4,125	4,125	4,125	4,113	4,113	4,113
1965.....	4,167	4,167	4,167	4,136	4,136	4,136	4,130	4,130	4,130
1966.....	4,248	4,248	4,248	4,174	4,174	4,174	4,143	4,143	4,143
1967.....	4,165	4,165	4,165	4,255	4,255	4,255	4,181	4,181	4,181
PROJECTED									
1968.....	4,103	4,103	4,103	4,172	4,172	4,172	4,262	4,262	4,262
1969.....	4,023	4,023	4,023	4,110	4,110	4,110	4,179	4,179	4,179
1970.....	3,829	3,829	3,829	4,030	4,030	4,030	4,117	4,117	4,117
1971.....	3,722	3,676	3,637	3,836	3,836	3,836	4,038	4,038	4,038
1972.....	3,879	3,672	3,498	3,730	3,684	3,644	3,843	3,843	3,843
1973.....	4,057	3,759	3,502	3,886	3,679	3,506	3,737	3,690	3,652
1974.....	4,240	3,852	3,512	4,064	3,766	3,509	3,893	3,686	3,513
1975.....	4,427	3,950	3,529	4,247	3,860	3,519	4,071	3,773	3,516
1976.....	4,608	4,054	3,560	4,434	3,958	3,536	4,254	3,866	3,526
1977.....	4,768	4,165	3,618	4,614	4,061	3,567	4,441	3,964	3,543
1978.....	4,925	4,282	3,689	4,774	4,172	3,625	4,621	4,068	3,574

¹ In projecting the number of children to be born, the Census Bureau uses the cohort-fertility method and several different assumptions as to completed fertility of women in the child-bearing ages (15-45 years). These different series of population projections correspond roughly to the following assumptions:

Series B average completed fertility rate of 3,100 children per 1,000 women presumes a modest drop from the levels of fertility experienced in the midfifties;

Series D average completed fertility rate of 2,450 children per 1,000 women presumes a substantial drop from the levels

of fertility experienced in the midfifties;

Series C fertility rate of 2,775 children per 1,000 women is an average of rates B and D.

For a detailed explanation of the methods used by the Census and the implications of each assumption, see the following source, pages 1-49: *Current Population Reports, Population Estimates: Projections of the Population of the United States, by Age, Sex, and Color to 1990, with Extensions of Population by Age and Sex to 2,015*, Series P-25, No. 381, Dec. 18, 1967, U.S. Department of Commerce, Bureau of the Census.

TABLE I.—*Ratios of population series B and population series D to population series C, by age group:*
*United States, 1971 to 1985*¹

[Projections based on series C may be converted to series B and D projections by multiplying the series C projection by the ratio shown in this table for the corresponding age, series, and year]

Year (fall)	Age group 5-17		Age group 5-13		Age group 14-17	
	For converting series C to series B	For converting series C to series D	For converting series C to series B	For converting series C to series D	For converting series C to series B	For converting series C to series D
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1971.....	1.00	1.00	1.00	1.00	1.00	1.00
1972.....	1.00	1.00	1.01	.99	1.00	1.00
1973.....	1.01	.99	1.02	.99	1.00	1.00
1974.....	1.02	.98	1.03	.98	1.00	1.00
1975.....	1.03	.98	1.04	.97	1.00	1.00
1976.....	1.04	.97	1.06	.95	1.00	1.00
1977.....	1.05	.96	1.07	.94	1.00	1.00
1978.....	1.06	.95	1.09	.92	1.00	1.00

¹ For definitions of series B, C, and D, and for sources of population data, see appendix table H.

TABLE J.—Enrollment in grades K-8 and 9-12 of regular day schools, by institutional control:
United States, 1957 to 1977¹

Series B Population Projection

(In thousands)

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	K-8	9-12	K-12	K-8 ³	9-12 ³	K-12	K-8	9-12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957.....	38,151	29,530	8,621	32,951	25,230	7,721	5,200	4,300	900
1958.....	39,581	30,504	9,077	34,081	26,004	8,077	5,500	4,500	1,000
1959.....	40,782	31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,000
1960.....	42,181	32,492	9,689	36,281	27,692	8,589	5,900	4,800	1,100
1961.....	43,364	32,895	10,469	37,464	28,095	9,369	5,900	4,800	1,100
1962.....	44,849	33,537	11,312	38,749	28,637	10,112	6,100	4,900	1,200
1963.....	46,487	34,304	12,183	40,187	29,304	10,883	6,300	5,000	1,300
1964.....	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	1,300
1965.....	48,473	35,463	13,010	42,173	30,563	11,610	6,300	4,900	1,400
1966.....	49,139	35,845	13,294	43,039	31,145	11,894	6,100	4,700	1,400
1967.....	49,887	36,240	13,647	43,887	31,640	12,247	6,000	4,600	1,400

PROJECTED⁶

1968.....	50,700	36,600	14,100	44,700	32,000	12,700	6,000	4,600	1,400
1969.....	51,200	36,600	14,500	45,300	32,100	13,100	5,900	4,500	1,400
1970.....	51,500	36,600	14,900	45,600	32,100	13,500	5,900	4,500	1,400
1971.....	51,700	36,400	15,300	45,800	31,900	13,900	5,900	4,500	1,400
1972.....	51,900	36,200	15,700	46,000	31,700	14,300	5,900	4,500	1,400
1973.....	52,100	36,100	16,000	46,200	31,600	14,600	5,900	4,500	1,400
1974.....	52,500	36,200	16,200	46,600	31,700	14,800	5,900	4,500	1,400
1975.....	52,900	36,400	16,500	47,000	31,900	15,100	5,900	4,500	1,400
1976.....	53,500	36,900	16,600	47,600	32,400	15,200	5,900	4,500	1,400
1977.....	54,100	37,500	16,600	48,200	33,000	15,200	5,900	4,500	1,400

¹ Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Fall enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1957 through 1961 estimated from school year enrollment.

⁴ Actual data from Office of Education surveys.

⁵ Preliminary data from State Departments of Education.

⁶ The projection of fall enrollment in regular day schools is based on the following assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old population in public school kindergarten and grades 1 and 2 will follow the 1957-67 trends; (2) the retention rate of public school grade 7 to grade 6 will remain constant at 103 percent from 1972 through 1977; (3) the retention rate of public school grade 9 to grade 8 will follow the 1957-67 trend with the restriction that it cannot exceed 105 percent; (4) the retention rate of all other public school grades will follow the 1957-67 trends with the restriction that they cannot exceed 100 percent; and (5) enrollment in grades K-8 and 9-12 in regular nonpublic day schools will remain approx-

imately the same throughout the projection period.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1967; (2) "Enrollment, Teachers, and School-housing," fall 1957 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Secondary Schools, 1960-61."

The population projections as of October 1, on which the enrollment projections are based (appendix table F), are consistent with Series B population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-25, No. 388, March 14, 1968. The series B population projection assumes that a calendar-year fertility rate approximating that of 1965 will prevail throughout the projection period.

TABLE K.—Enrollment in grades K-8 and 9-12 of regular day schools, by institutional control:
United States, 1957 to 1977¹

Series D Population Projection

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	K-8	9-12	K-12	K-8 ³	9-12 ³	K-12	K-8	9-12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957.....	38,151	29,530	8,621	32,951	25,230	7,721	5,200	4,300	900
1958.....	39,581	30,504	9,077	34,081	26,004	8,077	5,500	4,500	1,000
1959.....	40,782	31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,000
1960.....	42,181	32,492	9,689	36,281	27,692	8,589	5,900	4,800	1,100
1961.....	43,364	32,895	10,469	37,464	28,095	9,369	5,900	4,800	1,100
1962.....	44,849	33,537	11,312	38,749	28,637	10,112	6,100	4,900	1,200
1963.....	46,487	34,304	12,183	40,187	29,304	10,883	6,300	5,000	1,300
1964.....	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	1,300
1965.....	48,473	35,463	13,010	42,173	30,563	11,610	6,300	4,900	1,400
1966.....	49,139	35,845	13,294	43,039	31,145	11,894	6,100	4,700	1,400
1967.....	49,887	36,240	13,647	43,887	31,640	12,247	6,000	4,600	1,400

PROJECTED⁴

1968.....	50,700	36,600	14,100	44,700	32,000	12,700	6,000	4,600	1,400
1969.....	51,200	36,600	14,500	45,300	32,100	13,100	5,900	4,500	1,400
1970.....	51,500	36,600	14,900	45,600	32,100	13,500	5,900	4,500	1,400
1971.....	51,700	36,300	15,300	45,800	31,800	13,900	5,900	4,500	1,400
1972.....	51,500	35,900	15,700	45,600	31,400	14,300	5,900	4,500	1,400
1973.....	51,300	35,400	16,000	45,400	30,800	14,600	5,900	4,500	1,400
1974.....	51,100	34,800	16,200	45,200	30,300	14,800	5,900	4,500	1,400
1975.....	50,700	34,200	16,500	44,800	29,700	15,100	5,900	4,500	1,400
1976.....	50,400	33,700	16,600	44,500	29,200	15,200	5,900	4,500	1,400
1977.....	50,000	33,400	16,600	44,100	28,900	15,200	5,900	4,500	1,400

¹ Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Fall enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1957 through 1961 estimated from school year enrollment.

⁴ Actual data from Office of Education surveys.

⁵ Preliminary data from State Departments of Education.

⁶ The projection of fall enrollment in regular day schools is based on the following assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old population (series D) in public school, kindergarten and grades 1 and 2 will follow the 1957-67 trends; (2) the retention rate of public school grade 7 to grade 6 will remain constant at 103 percent from 1972 through 1977; (3) the retention rate of public school grade 9 to grade 8 will remain constant at 105 percent through 1977; (4) the retention rate of all other public school grades will follow the 1957-67 trends with the restriction that they cannot exceed 100 percent; and (5) enrollment in grades K-8 and 9-12 in regular nonpublic day schools will remain approximately the same throughout the

projection period.

For further methodological details, see appendix table A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1967; (2) "Enrollment, Teachers, and School-housing," fall 1957 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Secondary Schools, 1960-61."

The population projections as of October 1, on which the enrollment projections are based (appendix table G), are consistent with series D population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-25, No. 388, March 14, 1968.

The series D population projection assumes that a calendar-year fertility rate approximating that of the early 1940's will prevail throughout the projection period.

TABLE L.—Total degree-credit enrollment in all institutions of higher education, by sex: United States and outlying areas, fall 1957 to 1977

Year (fall)	Total fall enrollment		
	Total	Men	Women
(1)	(2)	(3)	(4)
1957.....	3,068,417	2,003,424	1,064,993
1958.....	3,258,556	2,110,426	1,148,130
1959.....	3,402,297	2,173,797	1,228,500
1960.....	3,610,007	2,270,640	1,339,367
1961.....	3,891,230	2,423,987	1,467,243
1962.....	4,206,672	2,603,072	1,603,600
1963.....	4,528,516	2,789,527	1,738,989
1964.....	4,987,867	3,051,761	1,936,106
1965.....	5,570,271	3,396,574	2,173,697
1966 ¹	5,930,000	3,577,000	2,353,000
1967 ¹	6,396,000	3,824,000	2,572,000

PROJECTED ²

1968.....	6,810,000	4,045,000	2,765,000
1969.....	6,959,000	4,106,000	2,853,000
1970.....	7,238,000	4,244,000	2,994,000
1971.....	7,589,000	4,421,000	3,168,000
1972.....	7,988,000	4,625,000	3,363,000
1973.....	8,388,000	4,830,000	3,558,000
1974.....	8,765,000	5,019,000	3,746,000
1975.....	9,130,000	5,201,000	3,929,000
1976.....	9,464,000	5,365,000	4,099,000
1977.....	9,763,000	5,506,000	4,257,000

¹ Estimates based on 1966 and 1967 opening fall surveys of total degree-credit and nondegree-credit enrollment not reported separately, and on preliminary data from the 1966 comprehensive survey of total degree-credit and total non-degree-credit enrollment reported separately.

² The projection of total degree-credit enrollment in all institutions is based on the assumption that enrollment in these institutions, expressed as a percentage of population aged 18-21 years, will follow the 1957-67 trend to 1977 in each enrollment category.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix table A.

NOTE.—Data are for the United States and the outlying areas for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1957 through 1967; (2) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first-term 1957 through 1963; and (3) unpublished preliminary data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966.

Population on which projections are based is shown in appendix table E.

TABLE M.—*Earned degrees, by level and sex of student: United States and outlying areas, 1957-58 to 1977-78*

Year	Bachelor's and 1st-professional degrees ¹			Master's degrees (except 1st professional) ²			Doctor's degrees (except 1st professional) ³		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1957-58----	365, 748	242, 948	122, 800	65, 614	44, 252	21, 362	8, 942	7, 978	964
1958-59----	385, 151	254, 868	130, 283	69, 584	47, 408	22, 176	9, 360	8, 371	989
1959-60----	394, 889	255, 504	139, 385	74, 497	50, 937	23, 560	9, 829	8, 801	1, 028
1960-61----	401, 784	255, 900	145, 884	78, 269	54, 158	24, 111	10, 575	9, 463	1, 112
1961-62----	420, 485	262, 015	158, 470	84, 889	58, 705	26, 184	11, 622	10, 377	1, 245
1962-63----	450, 592	274, 750	175, 842	91, 418	62, 944	28, 474	12, 822	11, 448	1, 374
1963-64----	502, 104	299, 813	202, 291	101, 122	69, 012	32, 110	14, 490	12, 955	1, 535
1964-65----	538, 930	319, 670	219, 260	112, 195	76, 211	35, 984	16, 467	14, 692	1, 775
1965-66----	555, 613	331, 122	224, 491	140, 772	93, 184	47, 588	18, 239	16, 121	2, 118
1966-67 ⁴ ---	589, 000	348, 000	241, 000	147, 600	98, 000	49, 500	19, 800	17, 500	2, 300
1967-68 ⁴ ---	690, 000	404, 000	286, 000	149, 100	99, 400	49, 600	22, 200	19, 700	2, 600

PROJECTED ⁵

1968-69----	755, 000	438, 000	317, 000	160, 200	107, 300	53, 000	25, 100	22, 200	2, 900
1969-70----	752, 000	432, 000	320, 000	190, 700	128, 200	62, 500	26, 500	23, 500	3, 000
1970-71----	766, 000	436, 000	330, 000	211, 300	142, 500	68, 700	27, 000	23, 900	3, 100
1971-72----	792, 000	447, 000	345, 000	212, 300	143, 500	68, 700	29, 200	25, 900	3, 300
1972-73----	828, 000	463, 000	365, 000	218, 000	147, 800	70, 200	34, 900	31, 000	3, 900
1973-74----	868, 000	481, 000	387, 000	227, 200	154, 400	72, 800	38, 900	34, 600	4, 400
1974-75----	906, 000	497, 000	409, 000	239, 800	163, 400	76, 500	39, 300	34, 900	4, 400
1975-76----	940, 000	512, 000	428, 000	253, 500	173, 000	80, 500	40, 600	36, 100	4, 500
1976-77----	964, 000	523, 000	441, 000	264, 400	180, 300	84, 100	42, 000	37, 300	4, 700
1977-78----	989, 000	534, 000	455, 000	274, 000	187, 000	87, 000	43, 900	39, 000	4, 900

¹ The definition of degrees considered as first-professional is not the same for all years. For a comparison of changing definitions over the past 10 years, see appendix table O.

² Beginning 1965-66, master's degrees include some degrees previously considered as first-professional. For detailed changes, see appendix table O.

³ Doctor's degrees include Ph. D. in any field as well as such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering). They exclude degrees defined as first-professional, such as doctor of jurisprudence, doctor of medicine, doctor of dental surgery, doctor of veterinary medicine, and doctor of divinity.

⁴ Estimated. The earned degree report for 1966-67 was received too late for inclusion in these tables.

⁵ The projection of earned degrees is based on the assumption that the percentage of degrees to population for each level and sex will continue the 1957-58 to 1965-66 trends. (Age of the population at the time of the graduation for the first level was assumed to be 22 years; for the second level, 24 years; for the doctorate level, 27 years.)

For further methodological details, see appendix table B.

NOTE.—Data include 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Degree data from U.S. Department of Health, Education, and Welfare, Office of Education publications on "Earned Degrees Conferred by Institutions of Higher Education," 1957-58 through 1965-66.

TABLE N.—*Classification of degrees by field of study*

[Individual fields listed in 1965-66 report of bachelor's and higher degrees conferred]

I. Natural sciences and related professions

Mathematics¹

Mathematics

Statistics

Computer science and systems analysis

Data processing

Computer science

Systems analysis

Computer science and systems analysis, other fields

Computer science and systems analysis, field not identified

Engineering¹

Physical sciences¹

Astronomy

Chemistry

Chemistry

Pharmaceutical chemistry

Earth sciences

Geology

Geophysics (including seismology)

Oceanography

Earth sciences, other fields

Meteorology

Physics

Other physical sciences

Physical sciences, general

Metallurgy (excluding metallurgical engineering)

Physical sciences, other fields

Physical sciences, field not identified

Biological sciences¹

Anatomy and histology

Bacteriology, virology, mycology, parasitology, and microbiology

Biochemistry

Biology, general

Botany

Botany, general

Plant pathology

Plant physiology

Entomology

Physiology

Zoology, general

Other biological sciences

Premedical, predental, and preveterinary sciences

Biophysics

Cytology

Ecology

Embryology

Genetics

Nutrition

Optometry (preprofessional degree)

Pathology (excluding plant pathology)

Pharmacology (excluding pharmacy)

Biological sciences, other fields

Biological sciences, fields not identified

Agriculture and forestry¹

Animal science

Animal, dairy, and poultry science

Other agriculture

Agriculture, general

Agriculture, business

Agronomy, field crops

Farm management (excluding agricultural economics)

Fish and game, or wildlife management

Food science

Horticulture (fruit and vegetable production)

International agriculture

Ornamental horticulture

Soil science

Agriculture, other fields

Agriculture, field not identified

Agricultural education

Forestry

Health professions¹

Dentistry, D.D.S. and D.M.D. only

Medicine, M.D. only

Nursing and/or public health nursing

Optometry (excluding preprofessional degrees)

Osteopathy

Pharmacy

Public health

Veterinary medicine, D.V.M. only

Other health professions

Chiropody or podiatry

Dental hygiene

Hospital administration

Medical technology

Occupational therapy

Physical therapy, physiotherapy

Radiologic technology

Clinical dental, medical, and veterinary medical sciences (advanced degrees only)

Health professions, other fields

Health professions, field not identified

Science, general program (without major field)¹

See footnotes at end of table.

TABLE N.—*Classification of degrees by field of study*—Continued

II. Social sciences, humanities, and related professions	Psychology ¹
Fine arts	General psychology
Architecture	Clinical psychology
Architecture	Counseling psychology
City planning ²	Social psychology
Music	Rehabilitation counselor training:
Music education	Educational psychology ⁴
Music including sacred music	Psychology, other fields
Speech and dramatic arts	Psychology, field not identified
Speech and hearing	Social sciences ¹
Speech and dramatic arts	Anthropology
Other fine and applied arts	Economics
Art education	Agricultural economics
Art, general	Economics
Fine and applied arts, other fields	Geography
Fine and applied arts, field not identified	History
Philosophy and religion ¹	American civilization, American culture
Philosophy	History
Scholastic philosophy	International relations
Religious education and Bible	Political science or government
Other religious fields	Public administration
Religion, liberal arts curriculum, nonsectarian	Sociology
Religion, other fields	Other social sciences
Religion, field not identified	Social sciences, general
English and journalism ¹	Area studies, regional studies
English	Folklore ²
Journalism	Foreign service programs (consular and diplomatic service)
Foreign languages	Industrial relations
Latin and/or classical Greek	Basic social sciences, other fields
French	Applied social sciences, other fields
German	Social sciences, field not identified
Russian and other Slavic languages	Education ¹
Russian	Physical education
Other Slavic languages	Physical education (including nonteaching)
Spanish	Health education
Other languages and language programs	Recreation education
Linguistics (including phonetics and semantics)	Industrial arts
Italian	Industrial arts education (nonvocational)
Portuguese	Trade and industrial education (vocational)
Philology and literature of romance languages	Other specialized teaching fields
Other Germanic languages	Education of exceptional children
Philology and literature of Germanic languages	Education of the partially sighted
Arabic	Education of the blind
Chinese	Education of the mentally retarded
Hebrew	Education of the emotionally disturbed
Hindi and/or Urdu	Education of the deaf
Japanese	Education of the crippled
Foreign languages, other fields	
Foreign languages, field not identified	
Teaching English as a foreign language	

See footnotes at end of table.

TABLE N.—*Classification of degrees by field of study*—Continued

Education of exceptional children, all other	Business and commerce, other fields
Specialized teaching fields, other fields	Business and commerce, field not identified
General teaching fields	Business education, commercial education
Nursing and/or kindergarten education	Distributive education, retail selling
Early childhood education	Home economics
Elementary education	Home economics education
Secondary education (including junior high school)	Home economics, general
Combined elementary and secondary education	Child development, family relations
Adult education	Clothing and textiles
General teaching fields, other fields	Foods and nutrition
Other education fields	Institution management, institutional administration
Educational administration, supervision, or finance	Home economics, other fields
Counseling and guidance	Home economics, field not identified
Rehabilitation counselor training ⁵	Law (L.L.B., J.D., or higher degrees)
History, philosophy, and theory of education, and comparative education	Military, naval, or air force science
Curriculum and instruction	Merchant marine (deck officer only)
Education, general	Military, naval, or air force science
Preprofessional bachelor's degrees	Theology
Other education fields	Theology (first-professional degree)
Education, field not identified	Theology (master's and doctor's degrees)
Library science	Miscellaneous and unclassified fields
Social work, social administration, social welfare	Trade and industrial training
Other ¹	Arts, general program (without major field)
Business and commerce	Arts and sciences, general program
Accounting	Interarea and interfields of study
Other business and commerce	Records management ³
Hotel and restaurant administration	Fields of study not listed
Secretarial studies	Field of study not identified
Business and commerce, general	

¹ Projected in tables 20, 21, and 22.

² Added item, 1965-66 report.

³ See also education.

⁴ Includes similar listing from education, 1965-66 report.

⁵ See also psychology.

TABLE O.—*Changes in degree-level definitions*

Prior to 1960-61	1960-61 through 1964-65	1965-66
BACHELOR'S DEGREES		
Number of years of work not specified. First-professional degrees included.	Number of years of work specified as less than 5. First-professional degrees excluded.	Number of years of work specified as less than 6. First-professional degrees excluded.
FIRST-PROFESSIONAL DEGREES		
Included with bachelor's degrees.	5 or more years of work required. Includes first-professional degrees such as degrees in dentistry, law, medicine, and theology. Includes master's degree such as degrees in business administration, hospital administration, law, library science, social work, and theology.	6 or more years of work required. Includes first-professional degrees such as degrees in dentistry, law, medicine, and theology. Excludes all master's degrees.
MASTER'S DEGREES		
	Includes all master's degrees except those considered first-professional. Includes second-professional degrees below level of doctorate.	Includes all master's degrees including those considered first-professional prior to 1965-66. Includes second-professional degrees below level of doctorate.
DOCTOR'S DEGREES		
Includes Ph. D. in any field and such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering).	No change.	No change.

TABLE P.—Constant dollar index

(1967-68=100)

July to June	Consumer price index ¹	Construction cost index ²	July to June	Consumer price index ¹	Construction cost index ²
1957-58.....	83. 994	72. 178	1966-67.....	96. 752	95. 119
1958-59.....	85. 147	74. 314	1967-68.....	100. 000	100. 000
1959-60.....	86. 349	76. 571	ESTIMATED ³		
1960-61.....	87. 474	78. 401			
1961-62.....	88. 359	80. 232			
1962-63.....	89. 428	82. 428			
1963-64.....	90. 686	84. 869	1968-69.....	102. 707	104. 345
1964-65.....	91. 852	87. 066	1969-70.....	105. 414	108. 691
1965-66.....	93. 842	90. 116			

¹ The monthly indexes were averaged on a July to June basis to correspond with the school year and converted to 1967-68=100. The 1957-59=100 index number for 1967-68 was estimated at 118.550.

² The monthly indexes were averaged on a July to June basis to correspond with the school year and converted to 1967-68=100. The 1957-59=100 index number for 1967-68 was estimated at 136.583.

³ Estimated on 4-year trend, 1964-65 through 1967-68, projected 10 years and fitted to 1967-68 estimate.

SOURCES: The Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor and the American Appraisal Company Construction Cost Index published in Construction Review by the U.S. Department of Commerce.

TABLE Q.—Estimated receipts of regular and "other" educational institutions, by institutional level and control, and by source: United States, 1957-58 to 1963-64 ¹

[In billions of current dollars and as percents]

Level, control, and source (1)	Amount				Percent			
	1957-58 (2)	1959-60 (3)	1961-62 (4)	1963-64 (5)	1957-58 (3)	1959-60 (7)	1961-62 (8)	1963-64 (9)
All levels:								
Total public and nonpublic.....	\$21.4	\$25.3	\$30.3	\$36.4	100.0	100.0	100.0	100.0
Federal.....	1.4	1.9	2.5	3.2	6.6	7.3	8.1	8.8
State.....	6.3	7.5	9.0	10.9	29.4	29.5	29.9	29.6
Local.....	8.6	9.8	11.2	12.8	40.2	38.5	37.2	35.4
All other.....	5.1	6.1	7.6	9.5	23.8	24.7	24.8	26.2
Total public.....	17.2	20.2	23.9	28.4	100.0	100.0	100.0	100.0
Federal.....	1.0	1.4	1.7	2.1	6.5	6.6	6.9	7.5
State.....	6.3	7.5	8.9	10.8	36.5	37.1	37.6	37.7
Local.....	8.6	9.8	11.2	12.8	50.0	48.2	47.4	45.6
All other.....	1.3	1.5	2.1	2.7	7.0	8.1	8.1	9.2
Total nonpublic.....	4.2	5.1	6.4	8.0	100.0	100.0	100.0	100.0
Federal.....	.4	.5	.8	1.1	7.3	10.0	12.5	13.6
State.....	(²)	(²)	.1	.1	(³)	(³)	1.6	1.2
Local.....	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
All other.....	3.8	4.6	5.5	6.8	92.7	90.0	85.9	85.2
Elementary and secondary:								
Total public and nonpublic.....	15.7	18.5	21.4	24.8	100.0	100.0	100.0	100.0
Federal.....	.6	.8	.9	1.0	4.1	4.2	4.2	4.0
State.....	4.8	5.8	6.8	8.1	30.4	31.4	31.9	32.5
Local.....	8.4	9.6	11.0	12.5	53.5	52.2	51.2	50.2
All other.....	1.9	2.3	2.7	3.2	12.0	12.2	12.7	13.3
Total public.....	13.8	16.3	18.8	21.7	100.0	100.0	100.0	100.0
Federal.....	.6	.8	.9	1.0	4.3	4.9	4.8	4.6
State.....	4.8	5.8	6.8	8.1	34.8	35.6	36.2	37.3
Local.....	8.4	9.6	11.0	12.5	60.6	59.2	58.7	57.8
All other.....	(²)	.1	.1	.1	.3	.3	.3	.3
Total nonpublic.....	1.9	2.2	2.6	3.1	100.0	100.0	100.0	100.0
Federal.....								
State.....								
Local.....								
All other.....	1.9	2.2	2.6	3.1	100.0	100.0	100.0	100.0

See footnotes at end of table.

TABLE Q.—Estimated receipts of regular and "other" educational institutions, by institutional level and control and by source: United States, 1957-58 to 1963-64¹—Continued

Level, control, and source (1)	Amount				Percent			
	1957-58 (2)	1959-60 (3)	1961-62 (4)	1963-64 (5)	1957-58 (6)	1959-60 (7)	1961-62 (8)	1963-64 (9)
Institutions of higher education:								
Total public and nonpublic.....	\$5.7	\$6.8	\$8.9	\$11.6	100.0	100.0	100.0	100.0
Federal.....	.8	1.1	1.6	2.2	13.6	16.0	18.1	19.5
State.....	1.5	1.7	2.2	2.8	26.7	24.8	24.6	23.9
Local.....	.2	.2	.2	.3	3.1	2.8	2.6	2.6
All other.....	3.2	3.8	4.9	6.3	56.6	56.4	54.7	54.0
Total public.....	3.4	3.9	5.1	6.7	100.0	100.0	100.0	100.0
Federal.....	.4	.6	.8	1.1	13.1	15.0	16.0	17.1
State.....	1.5	1.7	2.1	2.7	44.1	41.9	42.1	40.2
Local.....	.2	.2	.2	.3	5.1	4.7	4.3	4.4
All other.....	1.3	1.4	2.0	2.6	37.7	38.4	37.6	38.3
Total nonpublic.....	2.3	2.9	3.8	4.9	100.0	100.0	100.0	100.0
Federal.....	.4	.5	.8	1.1	14.4	17.4	20.9	23.6
State.....	(²)	(²)	.1	.1	1.2	1.5	1.5	1.2
Local.....	(²)	(²)	(²)	(²)	.2	.2	.2	.2
All other.....	1.9	2.4	2.9	3.7	84.2	80.9	77.4	75.0

¹ Includes estimates for "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools on posts. The annual receipts of "other" elementary and secondary schools were estimated as follows:

Years	Public	Nonpublic
1957-58 and 1959-60.	\$100 million.	Less than \$50 million
1961-62.....	\$200 million.	Less than \$50 million
1963-64.....	\$200 million.	\$100 million.

² Less than \$50 million.

³ Less than 0.05 percent.

NOTE.—Data are for 50 States and the District of Columbia

for all years. Receipts include revenue and nonrevenue receipts, current and plant-fund receipts, proceeds of loans, less transfers of funds which would result in duplication, and less repayment of loans. All receipts and deductions concerning loans are included in "all other" sources. Deduction of transfers was made from data in "all other" sources.

SOURCES: Receipt data from U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," 1957-58, 1959-60, 1961-62, and 1963-64; (2) "Financial Statistics of Higher Education," 1957-58, 1959-60, 1961-62, and 1963-64; (3) "Digest of Educational Statistics," 1967; and (4) unpublished data in the U.S. Office of Education.

TABLE R.—Federal funds for education and related activities: Estimated obligations for fiscal years 1962 to 1969

[In thousands of dollars]								
Type of support, level, and program area (1)	1962 (2)	1963 (3)	1964 (4)	1965 (5)	1966 (6)	1967 (7)	1968 (8)	1969 (9)
PART I. Federal Funds Supporting Education in Educational Institutions								
Total grants and loans-----	\$2, 173, 700	\$2, 507, 600	\$2, 749, 300	\$3, 908, 700	\$6, 779, 578	\$8, 326, 272	\$8, 788, 400	\$9, 162, 031
Grants, total-----	1, 852, 500	2, 111, 100	2, 350, 000	3, 379, 200	6, 167, 078	7, 583, 189	8, 146, 756	8, 381, 309
Elementary-secondary education-----	554, 400	599, 800	665, 800	942, 500	2, 479, 278	3, 084, 139	3, 252, 046	3, 389, 180
School assistance in federally affected areas-----	304, 900	330, 300	323, 100	407, 600	433, 900	469, 137	439, 137	410, 335
Economic opportunity programs ¹ -----	53, 000	60, 900	67, 000	123, 500	404, 300	721, 257	640, 007	755, 076
National Defense Education Act—equipment, guidance-----	58, 600	58, 100	92, 400	90, 500	103, 600	107, 700	106, 200	38, 950
Supporting services ² -----	4, 300	4, 700	5, 200	6, 500	173, 100	273, 551	349, 587	281, 721
Assistance for educationally deprived children ³ -----					959, 000	1, 057, 455	1, 206, 308	1, 268, 561
Teacher Corps-----	4, 000	6, 800	5, 100		6, 500	11, 324	13, 500	31, 235
Vocational education ⁴ -----	26, 400	26, 300	24, 900	127, 700	184, 678	194, 636	189, 525	201, 124
Dependents' schools abroad-----	40, 500	45, 300	61, 500	80, 500	86, 100	87, 533	96, 824	116, 491
Public lands revenue for schools-----	43, 500	44, 600	48, 600	51, 500	54, 100	50, 173	52, 466	54, 800
Assistance in special areas ⁵ -----	14, 800	17, 700	32, 600	50, 200	68, 800	56, 969	70, 414	71, 710
Veterans' education-----						49, 296	83, 020	139, 970
Other ⁶ -----	4, 400	5, 100	5, 400	4, 500	5, 200	5, 108	5, 058	19, 207
Higher education-----	1, 210, 300	1, 397, 800	1, 480, 400	2, 052, 600	2, 830, 400	3, 590, 626	3, 792, 730	3, 590, 790
Basic research in U.S. educational institutions proper ⁷ -----	602, 900	691, 600	698, 600	784, 900	940, 300	1, 036, 473	1, 102, 330	* 1, 102, 300
Research facilities ⁷ -----	121, 800	157, 900	133, 500	191, 700	194, 000	203, 050	192, 370	* 192, 400

Training grants.....	196,000	234,600	261,200	282,400	365,500	363,608	391,459	433,291
Fellowships and traineeships.....	103,900	143,000	181,800	196,900	264,900	350,162	392,028	431,920
Facilities and equipment.....	37,100	41,000	56,100	384,100	668,900	822,203	790,128	289,276
Other institutional support.....	33,000	43,400	69,500	93,400	163,800	169,925	187,812	258,200
Other student assistance.....	103,900	69,900	62,300	100,400	214,200	590,586	666,782	787,451
Other higher education assistance.....	11,700	16,400	17,400	18,800	18,800	54,619	69,821	95,952

Vocational-technical and continuing education (not classifiable by level).....

Vocational-technical education ⁹	27,700	74,700	161,900	291,900	432,800	470,752	455,758	484,928
Economic opportunity programs ¹⁰	6,900	8,000	9,100	72,400	385,100	345,823	539,988	783,083
Veterans' education.....	49,900	29,000	25,100	10,300	6,300	11,283	13,820	14,799
General continuing education.....	400	400	1,900	1,500	19,200	29,200	40,250	50,000
Training State and local personnel ¹¹	2,900	1,400	5,800	8,000	14,000	28,649	23,844	29,133
National Foundation on the Arts and the Humanities.....							11,989	13,000
Other ¹²							10,728	15,320

Loans, total..... 321,200 396,500 399,300 529,500 612,500 743,083 641,644 780,722

Elementary-secondary education.....

Loans to private schools.....	700	600	500	400	800	1,500	1,000	1,000
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Higher education..... 320,500 395,900 398,800 528,200 610,700 741,281 634,596 779,722

Student loan program, National Defense Education Act¹³.....

College facilities loans ¹⁴	74,600	90,700	111,300	159,200	234,900	237,652	251,266	253,904
	245,900	305,200	287,500	369,000	375,800	503,629	383,330	525,818

Vocational-technical and adult education.....

Insured vocational education loans.....				900	1,000	302	6,048	-----
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See footnotes at end of table.

TABLE R.—Federal funds for education and related activities: Estimated obligations for fiscal years 1962 to 1969—Continued

Type of support, level, and program area (1)	1962 (2)	1963 (3)	1964 (4)	1965 (5)	1966 (6)	1967 (7)	1968 (8)	1969 (9)
PART II. Other Federal Funds for Education and Related Activities								
Applied research and development ¹⁵	754,700	805,700	906,300	952,300	1,026,600	1,064,699	1,144,377	1,144,300
School lunch and milk programs	366,900	379,300	411,700	507,500	421,900	448,005	477,868	499,608
Training of Federal personnel	1,177,500	1,279,600	1,370,400	1,577,900	1,706,700	1,537,399	1,679,767	1,722,337
Military academies	74,000	75,700	77,400	105,100	137,200	(16)	(16)	(16)
Professional training, military	1,072,000	1,172,000	1,245,000	1,399,100	1,487,900	1,442,950	1,570,528	1,597,601
Civilian education and training in non-Federal facilities	31,500	31,900	48,000	73,700	81,600	94,449	109,239	124,736
Library services	22,200	23,900	25,300	82,900	86,300	141,381	141,790	144,844
Grant to public libraries	6,900	7,400	7,500	54,900	55,000	76,000	68,000	50,449
National library services ¹⁷	15,300	16,500	17,800	28,000	31,300	65,381	73,790	94,395
International education	109,100	116,100	130,000	178,700	232,658	326,742	321,305	368,352
Educational exchange program	28,100	35,600	38,000	37,400	53,500	44,712	43,763	43,523
Agency for International Development projects	81,000	80,500	84,600	87,800	111,800	203,270	202,800	238,800
Peace Corps				44,300	57,175	41,944	38,321	41,584
Other international education and training ¹⁸			7,400	9,200	10,183	36,816	36,421	44,445
Other	334,300	318,700	381,900	400,200	403,800	349,861	406,596	502,791

Agricultural extension service-----	59,300	63,000	79,400	85,400	90,700	92,824	96,602	101,005
Education in Federal correctional institutions-----	2,100	2,500	5,200	5,100	15,200	3,304	4,000	33,087
Other education and training ¹⁰ -----	7,000	8,300	2,900	3,500	3,600	6,341	8,343	9,027
Value of surplus property transferred:			10,600	11,000	12,800	15,199	16,389	17,662
Acquisition cost of personal property-----	244,900	223,800	268,700	277,300	266,400	215,509	257,075	316,400
Fair value of real property-----	21,000	21,100	15,100	17,900	15,100	16,684	24,187	25,610

¹ Includes Office of Economic Opportunity and Indian education programs.

² Includes supplemental centers, school library materials, strengthening State education agencies, captioned films for the deaf, dissemination of information, school counseling and testing, and American Printing House for the Blind.

³ Includes Elementary and Secondary Education Act Title I, handicapped children, dropout prevention, bilingual education, Kendall School for the Deaf, and development facilities in redevelopment areas.

⁴ Estimated secondary school portion.

⁵ Includes District of Columbia, Canal Zone, territories and dependencies, Cuban refugees, and payments in lieu of taxes by the Atomic Energy Commission and the Tennessee Valley Authority.

⁶ Includes elementary-secondary program planning and evaluation, model secondary school, educational exchange, National Science Foundation science education, Peace Corps, and National Aeronautics and Space Administration elementary-secondary school program.

⁷ Data are from "Federal Funds for Research, Development, and Other Scientific Activities," annual publication, National Science Foundation. Includes university-operated research centers.

⁸ 1969 estimates not available. Amounts are for 1968.

⁹ Includes vocational education except secondary school portion, Manpower Development and Training Act training and subsistence and technical institute for the deaf.

¹⁰ Includes Office of Economic Opportunity programs for vocational-technical and continuing education, Social and Rehabilitation Service, work-incentive activities, Cuban refugee assistance, development facilities in redevelopment areas, and Indian education.

¹¹ Includes Social Security education and training, Public Health Service training for disease prevention and environmental control, training for law enforcement personnel, Atomic Energy Commission nuclear training courses, and Department of Housing and Urban Development Community development program.

¹² Includes National Institutes of Mental Health mental health training; Social and Rehabilitation

Service rehabilitation training and rehabilitation facilities and services; Department of Commerce development planning, technical assistance and research; and Small Business Administration training program. Similar information not available prior to 1967.

¹³ Includes National Defense Education Act student loans, insured student loan advances, loans for nurse training and health professions, and Cuban refugee loans.

¹⁴ Includes Department of Housing and Urban Development college housing loans and Office of Education college facilities loans.

¹⁵ Data derived from "Federal Funds for Research, Development, and Other Scientific Activities," annual publication, National Science Foundation.

¹⁶ Separate figures not provided for 1967, 1968, and 1969 but included in "Professional training, military."

¹⁷ Includes Library of Congress, Smithsonian Institution, General Services Administration, National Archives and Records Service, National Agricultural Library, and Government Printing Office depository library and catalog and index activities.

¹⁸ Includes special foreign currency education research and training, Public Health Service National Center for Health Statistics, English language teaching in Poland, U.S. Information Agency education assistance, National Science Foundation international education activities, Atomic Energy Commission international education activities, and National Aeronautics and Space Administration international education activities.

¹⁹ Includes Department of Labor apprenticeship and training support, Department of Commerce State technical services program, and Department of the Interior mine safety training.

SOURCE: Compiled by the National Center for Educational Statistics, Office of Education, U.S. Department of Health, Education, and Welfare, from information in the "Special Analysis, Budget of the United States," Bureau of the Budget. Research data are from "Federal Funds for Research, Development, and Other Scientific Activities XVI," National Science Foundation.